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SYNTHESIS OF SEISMICITY STUDIES
FOR WESTERN ALASKA

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I. SUMMARY: OBJECTIVES, CONCLUSIONS AND IMPLICATIONS FOR OIL AND GAS DEVELOPMENTS

The objective under the present study is to synthesize the available geophysical and relevant geological information in evaluating the extent of seismic hazards posed by earthquakes located in and around Norton and Kotzebue Sounds. The locations of earthquakes employing the local seismographic network show offshore and onshore seismic activity. In some cases, the observed earthquake distribution patterns closely follow the mapped traces of geological features, principally faults.

From the results of analysis of the available earthquake data, it is interpreted that normal faulting is the principal mode of strain energy release in the area. This implies that unlike the dominance of subduction tectonics in central and southcentral Alaska (Bhattacharya and Biswas, 1979), areas in western Alaska are primarily under tensional stress field. This interpretation appears to be substantiated by the presence of widespread late Cenozoic basal tectonic volcanism (Hudson, 1977) and mapped normal faults in the offshore (Ettreim et al., 1979; Fisher et al., 1981) and onshore (Grantz et al., 1979; Hudson and Plafker, 1978; Turner and Swanson, 1981) areas of Seward Peninsula.

Two important seismic parameters, namely recurrence time for moderate size to strong earthquakes and the characteristics of wave energy attenuation remained unresolved at this stage. However, determination of the values of the latter parameter (attenuation) can be accomplished from a further analysis of the available analog data. This has been shown by Biswas and Aki (1983) for central and southcentral Alaska. It is anticipated that

the results of a similar study for western Alaska will have an immense benefit for an orderly development of hydrocarbon potentials, not only for areas around Seward Peninsula; but also for the neighboring areas in the Bering and **Chukchi** Seas. Nevertheless, for the exploration and exploitation of economically viable hydrocarbon deposits, if found around Seward Peninsula, a prudent utilization of the available technology should provide safeguards against seismic hazards in the offshore and onshore areas.

III. INTRODUCTION

A. General Nature and Scope of Study

In this study an attempt is made to compile the available data related to the **seismicity of** western Alaska, in order to address hazards posed by the current tectonic activity in the above area. The data compiled were analysed for the regional stress field in the study area. Although, the scope of the study by no means exhaustive, some of the objectives outlined below have been achieved.

B. Scientific Objectives

The specific objectives of this study are the following:

- (i) To determine the spatial and temporal characteristics of the **seismicity**, and its relationship to mapped tectonic features.
- (ii) To determine the predominant failure mechanisms associated with the earthquakes located along or near the known geological features or trends.
- (iii) To synthesize the results of the above studies under (i) and (ii) in order to integrate the **seismotectonic settings** of the study area with the overall tectonic framework of Alaska.

c* Rel evance to Probl ems of Petroleum Devel opment

Geophysical and geological explorations for hydrocarbon **concentrations** in the offshore areas around Seward Peninsula are in progress. Consequently, the evaluation of the level of **seismicity** for these areas has been a logical undertaking to assist in the planning and design of future construction projects.

111. CURRENT STATE OF KNOWLEDGE

Earthquakes located during about a five-year period **by a local** network were found to distribute widely throughout the entire study area, including Norton and Kotzebue Sounds. Most significantly, there are a number of instances where earthquake clusters tend to lie along, or parallel to mapped faults or linear structural trends. The **seismicity** is mainly **crustal** in nature.

The strongest earthquakes recorded during the study period was of magnitude 5.2. It was located in the Kotzebue area where the earthquake was felt quite widely. Examination of the past and present magnitudes of earthquakes located in and around Seward Peninsula shows **that** the strongest expected earthquake to occur in the area is in the magnitude range of 6 to 7.

IV. STUDY AREA, METHODS, RATIONALE OF DATA COLLECTION AND PROCESSING OF DATA

The outline of the study area is shown by heavy lines in Fig. 1. The locations of the epicenters of earthquakes shown in this figure were compiled by Meyers (1976) from the Alaskan earthquake catalog of the U.S. Geological Survey. The data represent the time period from 1867 through 1974.

The data of Fig. 1 illustrate dense clustering of earthquakes occurs along the southern coastal belts and in the central interior. Earthquake

activity on the west of 153°W , as shown in this figure, becomes progressively diffused. However, under the OCEAP sponsorship a related project dealing with the compilation of Alaskan earthquake catalog was undertaken by the investigators of the Geophysical Institute. The purpose of this project was to update Meyers (1976) catalog. A plot of all earthquakes of magnitude (M) > 4.0 sorted for western Alaska from the updated catalog is shown by hollow squares in Fig. 2; they are listed in Table 1. In this figure, the locations of the epicenters of earthquakes of $M > 5.5$ are shown by solid circles.

In Table 1, the symbols NO, ERH, ERZ, RMS, GAP and DMIN refer, respectively to the number of station readings used to locate each earthquake, standard error in **epicentral** location, standard error in focal depth, root mean square of travel time residuals, largest azimuthal difference between two neighboring stations with respect to the epicenter and the distance of the epicenter from the nearest station.

It may be noted in Fig. 2 that the strongest earthquakes located offshore and onshore areas are of magnitude 7.3 (1958) and 6.9 (1928), respectively. At the same location of the later event (6.9), after 3 months a second earthquake of magnitude 6.2 was located. The other two events (magnitude > 6.0) located in the Chukchi Sea during the same year are separated by 2 days. Since these four earthquakes occurred in 1928, we may anticipate significant uncertainties in their locations and perhaps in their magnitude values.

The other strong earthquake (1958) mentioned above, is located in the Koyukuk River basin near the village Huslia. This earthquake will be referred to as the Huslia earthquake. It was felt widely in central and **southcentral** Alaska and caused extensive ground breakage in the **epicentral** area as reported by Davis (1960).

On the basis of numerous fissures observed in the lake ice, Davis (1960) delineated a ENE-WSW zone of ground breakage over an area of about 100 km long and 40 km wide. He also measured maximum vertical displacement of about 1.5 m near the epicentral area along a small northwesterly oriented fault. From the field data, Davis interpreted the observed ground displacements along fissures and their orientations as more related to the topography rather than to the primary movement associated with the **Huslia** earthquake.

The main shock of the **Huslia** earthquake was followed by an aftershock sequence. Utsu (1962) studied this sequence and obtained a value of 0.93. The strongest aftershock of magnitude 6.7 was located just ESE of the main shock (Fig. 2). From the location of the epicenter of this aftershock with respect to that of the main shock, it appears that the rupture propagated in the ESE direction. This direction roughly agrees with that of the small fault observed by Davis (1960). But it differs from the rectilinear zone (ESE-WSW) of ground breakage as noted by Davis. The most probable orientation of the rupture formed by the **Huslia** earthquake is discussed further in a latter section.

The two earthquakes (magnitude > 5.5) located in 1964 and 1965 were felt strongly by the coastal communities of Norton Sound (Fig. 2). The characteristics of these earthquakes are given in a latter section.

In view of the earthquakes shown in Fig. 2, it appeared logical to investigate the nature of seismicity in western Alaska more closely. In order to achieve this objective, initially a 7-station local seismographic network was installed during the fourth quarter of 1976. These stations supplemented a single station on Granite Mts. (GMA) which was operated by

the Alaskan Tsunami Warning Center (**ATWC**) on the eastern side of Seward Peninsula. This station was closed in mid-1978.

The local earthquakes detected with above network, besides having significant scatter, revealed a few clusters of epicenters along mapped geological features. **Biswas et al.** (1980) have given the details of this phase of the study. However, to increase the precision in the locations of earthquakes, the network was **densified** in mid-1980 by installing another nine short-period vertical component stations. The layout of the network is shown in Fig. 3. In this figure, the stations shown by hollow square and circles and solid circles were installed in 1976 and 1980, respectively.

Each station of the network consisted of a short period vertical component seismometer (**Geotech** S13), set to a nominal one-second natural period with 0.5 of critical damping. However, the station located at **Kotzebue** (KTA) had three components (vertical, north-south and east-west) and was equipped with different model seismometers (**Geotech** S500) than the other stations. This **model** of seismometer is, small enough (0.057 m diameter and 0.165 m length) to facilitate installation, and has the added benefit of being insensitive to ground tilt. This was particularly important because a layer of permafrost was encountered at shallow depth (1-2 ft) at this station site.

The signals from the seismometers were **preamplified** by **Monitron** Model 2000 or 2001 amplifiers. The electronic systems of all stations, except for the one at Kotzebue (**KTA**), were powered by a set of **Carboneaire** Model ST-22 batteries, capable of delivering 1100 Amp-hr of service. The electronic package at KTA was powered by locally available 110V lines. The data from the stations were telemetered to the central recording site at the Northwest Community College at home by frequency-modulated audio **subcarriers** via a

combination of VHF (transmitter: **Monitron T15F**; receiver: **Monitron R15F**)

and microwave leased circuits.

The **microseismic** background was found to vary considerably from one station site to the next. However, the operational gain of each station was set to **attain** maximum signal-to-noise ratio. Consequently, **all** stations of the network **could** not be operated at identical gain settings. The system response of the network is shown in Fig. 4 in which it may be noted that the lowest and highest gain settings **were** about **80K** and **1M** at 5Hz, respectively.

The recording site consisted of an uninterrupted power supply system (TOPAZ), a discriminator bank (**EMTEL**), synchronized digital clock (True-Time) and a 16 mm film recorder (**Geotech**). The film record was changed **daily** and shipped to Fairbanks on a weekly basis.

In addition to recording the data **of** the network at **Nome**, the data from the local Nome seismographic station **AVN** (Fig. 3) were telemetered to the Geophysical Institute by microwave circuit. This long circuit was leased by the Alaska Tsunami Warning Center, Palmer. Though the station was operated by us, the data were shared by both the organizations. Station location details are given **in** Table 2.

At the Geophysical Institute, the telemetered data from AVN were recorded on heat sensitive paper by **Helicorder (Geotech RV-301B)**. This recording mode facilitated **the** identification of local earthquakes and approximate origin time for rapid scaling of the daily film records recorded at the central recording site (**Nome**). The following data were scaled from the records: first arrival times of the P-wave and the S-wave when possible, direction of P-wave first motion, and the maximum amplitude and period **in** the recorded trace.

For impulsive arrivals, the first onset times for P-waves could be scaled with a precision of ± 0.1 sec, while for emergent arrivals, the uncertainty in the arrival times might be as high as ± 0.5 sec. For S-wave arrivals, uncertainty of the measurements is even larger.

Scaled data for each earthquake were input in appropriate format to the VAX 11/780 computer and processed by the computer program of Lahr (1982) for location purposes. The **local** magnitude (M) of the earthquakes were computed by using the formula of Richter (1958) for **local** earthquakes, incorporating a correction factor for the instrumentation used.

The crust and upper mantle structure for western Alaska is not yet known. Thus, to compute travel times for P waves, a plane-layered P-wave velocity model for the crust, obtained from the central Alaskan data from earthquakes and quarry blasts, was used. The upper mantle section was taken **from Biswas and Bhattacharya** (1974). The details of this model are shown in **Table 3**. A ratio of 1.78 between P- and S-wave velocities, corresponding to Poisson's solid, was used for the computation of S-wave travel times.

These limitations being understood, a preliminary computer run was made and the output examined for reading errors. If the time residuals for an earthquake (that is, the difference between the observed and computed travel times) for any station exceeded 1 sec, the records were resealed to reduce the uncertainties **to** a minimum. The corrected data were then used for a second computer run allowing all focal parameters to vary. The results indicated that for a significant number of earthquakes, the **hypocenters** were located at **sub-crustal** depths which differed from the results of **Biswas et al.** (1980). They used the computer program (**HYP0-71**) of Lee and Lahr (1975) for the location purposes and interpreted the re-

suits to represent **crustal seismicity** for western Alaska. The location program (**Hypoellipse**) used in the present study is a modified version of **HYP0-71**.

In order to resolve the discrepancy in focal depths, the data for a group of well recorded earthquakes distributed over Seward Peninsula were selected. For this data set, different initial focal depths were assigned in the least squares iteration used by the location program. The results are shown in Table 4. The symbols, RMS, ERH and ERZ of this table have been explained before.

The values in the first column in Table 4 represent the assigned initial focal depths; while those in column 2 are location program output. However, the values in columns 2-5 are averages of values obtained for all the earthquakes selected for the test case.

On the basis of the least average values obtained for both RMS and ERZ in the above test (Table 4) for 10 km as the initial focal depth, we set this depth as the starting value for all earthquakes in the location program. Also, the earlier data gathered from 1977 through mid-1980 were reprocessed for maintaining consistency with the results obtained for the data of the latter period (mid-1980 through mid-1982). **The final** output of the location computer program yielding the location details of the **hypocenters** are given in Table 5.

Out of several hundred earthquakes located with the data gathered by the local network, only for 16 events the **focal** depths exceeded 40 km, thereby confirming the earlier results of Biswas et al. (1980). Also, only 20 per cent of the total number of earthquakes located by the sparsely distributed stations during 1977 through mid-1980 period have location errors of less than 10 km in both **epicentral** positions (ERH) and focal depths (ERZ). The above percentage value changed from 20 to 54 for the mid-

1980 through mid-1982 period. Thus, by approximately doubling the number of stations of the network in the latter years, we achieved an improvement in the number of **well** located events by more than a factor of 2.

v. RESULTS

A plot of the data presented in Table 5 is shown in Fig. 5. In this figure, the earthquakes were not sorted by their magnitudes (M) which range from about 2.0 **to** 5.2. The strongest earthquake ($M = 5.2$) recorded by the **local** seismographic network **is** located inland and northwest of Kotzebue Sound as shown in **Fig. 5**.

A. Spatial Distribution of Earthquakes

Despite considerable scatter **in** the distribution of earthquakes, a number of distinct clusters of epicenters are seen, in Fig. 5. For instance, the cluster **labelled** A, lies close to the epicenter of the 1965 ($M = 5.8$) earthquake. Similarly, the cluster B coincides with the 1950 ($M = 6.5$) earthquake. Though, pre-1977 data do not show any concentration of earthquakes near the epicenter of the 1950 event (Fig. 2), from the current data it appears to be tectonically quite active part of Seward Peninsula. Similarly, the cluster C, though small in **areal** extent like A, lies close to the epicenter of the 1964 ($M = 5.7$) earthquake. Near the cluster D, though no significant earthquake is found in the earthquake catalog (Fig. 2), it coincides with the position of the **granitic** Ear Mts. (≈ 700 m elevation) which is separated from the mountain systems on the south by **low** land (tundra].

To relate the earthquakes with the known tectonic features, all epicenters shown in Fig. 5 are plotted on an overlay of mapped structural

traces in the study area. The results are shown in Fig. 6. Because dense clustering of epi centers in some areas partially obscures the structural features, these are shown separately in Fig. 7. Major **lineaments** on Seward Peninsula as identified from satellite imageries are also included in Fig. 7.

The mapped geologic features shown in Fig. 7 were taken from Beikman (1980), Grantz et al. (1979), Ettreim et al. (1979) and Fisher et al. (1981). The traces of mapped features were digitized at close intervals, and converted to the same projection and scale as that used to plot the epi centers in the preparation of Fig. 7.

From the results shown in Fig. 6, it appears that the major faults in the southeast section, including a large part of the **Kaltag** fault are at present tectonically inactive. This is also the case with the thrust belt of the Brooks Range and the offshore structures in the northwest section of the study area. However, these geologic features, as well as those mentioned above lie outside the seismographic network used for the present study. Thus, an alternative interpretation would be that the network geometry and the operational gains of the stations ~~used~~ were inadequate in detecting earthquakes outside the network periphery. If this is true, we have to assume that the **seismicity** associated with the above geologic structures is relatively at a lower level.

In **Kotzebue** Sound, though no mapped geologic structure was found in the literature, it is associated with significant seismic activity. In Norton Sound, earthquakes scatter widely but they show a weak concentration along the fault system F5 (Fig. 7). However, in Seward Peninsula, the mountain axis M1 (Darby Mts.) and the fault system F1 tend to follow the epicentral cluster B (Fig. 5). Similar concentration of epi centers along the faults F3 (Kigluaik) and F4 in the **southcentral** part, are seen.

In the central part of Seward Peninsula, though a number of **faults** and lineaments are present, the **epicentral** scatter is too high to associate the earthquakes there with any specific geological feature. However, the cluster D appears to lie at the northwest end of the fault system F6. The cluster E coincides with the complex thrust fault F7. It is discussed later that at present this cluster is a **result** of normal faulting.

Hudson and **Plafker** (1978) and Turner and Swanson (1981) identified the **Kigluaik** (F3) and Bendeleben (F2) faults as the major normal faults of Seward Peninsula with Holocene displacements. From the present study, it appears that the central part of F2 is not active.

For the sake of completeness, we digitized the **Bouguer** gravity map of western **Alaska** (Barnes and Hudson, 1977). This is shown in **Fig. 8** in the same projection as used for the other data. The area in the northeast with prominent negative anomaly ($\Delta g > -40$ mgal) represents the Brooks Range. In general, the gravity variations closely follow the topography rather than any mapped tectonic features of significance or **epicentral** cluster.

B. Focal Mechanism

The regional stress pattern for an area can be deduced from focal mechanisms of earthquakes located in that area. It is best achieved by considering **local** as well as **teleseismic** data recorded in different azimuths for moderate size to strong earthquakes. Due to the limited time permitted for the operation of the local network, the data gathered for western Alaska under this project do not meet, even marginally, the above requirements. We therefore used the data for an ensemble of earthquakes selected for different sections of the study area in most cases. This approach has inherent uncertainties in measuring the first-motions for small earthquakes.

To ascertain the correct recording polarity of the stations of the local network, a month-by-month polarity check was made for each station using the sense of the P-wave first-motions recorded for underground nuclear explosions in the United States and Russia. In the absence of explosion data, we used strong **teleseismic** earthquakes. The polarity check was made for the entire time period from 1977 through mid-1982.

After initial check of P-wave first-motions for the earthquakes **listed** in Table 5, we selected the earthquakes located in clusters B, C, D and E (**Fig. 5**). For each cluster, we further made **selection** for events which were recorded by the largest number of stations. For the selected earthquakes, the angles of incidence and **epicentral** distances of the stations were taken from the output of the location computer program. The P-wave first-motions were then plotted on an equal area projection of lower **focal** sphere for each earthquake in a given cluster. For stations where the incident angle was found to be greater than $\pi/2$ radian (ray leaving the focus upward), the observed first-motion was plotted in the opposite azimuth. In doing so, we have assumed that the radiation pattern has a π radian symmetry with respect to the focus.

The clusters C and E, as mentioned before, consist the earthquakes of 1964 ($M = 5.7$) and 1981 ($M = 5.2$), respectively. We, therefore, used in addition to **local** data, **teleseismic** data from **World Wide Standard Seismographic Network (WWSSN)** and **Standard Canadian Network (SCN)** for these two events. Also, in this study we incorporated the known fault plane solutions for other two earthquakes. The location details of these strong earthquakes are **listed** in Table 6. The focal mechanism solutions are discussed below.

(a). Solution No. 1.

The focal mechanism solution is shown in Fig. 9, which represents the **Huslia** earthquake. Ritsema (1962) compiled and studied the first-motion data which were also used by **Wickens** and **Hodgson** (1967) for their focal mechanism studies. The best fit nodal planes to the data as interpreted by the above authors are shown in the above figure. Both solutions represent normal faulting for the **Huslia** earthquake.

Using the **ENE-WSN** orientation of the zone of ground breakage observed by Davis (1960), as mentioned earlier, Ritsema (1962) interpreted the nodal plane a_2 as the fault plane. However, in addition to the alignment of the epicenters of earthquakes (Fig. 2 and 5) located in the **Huslia** area, the location of the epicenter of the strong aftershock ($M = 6.7$) with respect to that of the main shock, show that a **NNW-SSE** oriented active fault through this area is equally possible. This orientation closely agree with the strike of the nodal plane b_1 of the fault **plane** solution of **Wickens** and **Hodgson** (1967). It maybe noted here that Davis (1980) observed a northwesterly fault in the **epicentral** area of **Huslia** earthquake as discussed before.

(b) Solution No. 2

This solution (Fig. 10) represents the earthquake of 1965 ($M = 5.8$). It is given by Sykes and Sbar (1974) which shows normal faulting. Though any of the two nodal planes (a and b) may represent the **fault** planes, from their similar strike direction, we interpret a NW-SE oriented fault.

For the above earthquake, using the fault **plane** solution of Sykes and Sbar (1974), we analyzed the long-period Rayleigh wave data recorded by WWSSN and SCN stations to compute phase velocities by the single-station method. These values were used to study the focal mechanism of the 1964 ($M = 5.7$) earthquake, the results of which are discussed later.

(c) Solution No. 3

The solution is shown in Fig. 11; it is a composite solution representing the selected small earthquakes from the cluster B. Though two **possible fits** to the data (a_1, b_1 and a_2, b_2) are shown, other orientations of the nodal planes seem to be possible. However, **dilatational** first-motions being the dominant ones occupying the central part of the figure, we interpret that the earthquake in the cluster B are primarily associated with normal "faults.

(d) Solution No. 4

It is shown in Fig. 12; the first-motion data for the 1964 ($M = 5.7$) earthquake were measured on the short and long-period seismograms of **WWSSN** and **SCN** stations. As these data concentrate around the center of the figure and fail to constrain the **fault** plane solution well, they have been supplemented by the first-motion data for other small earthquakes selected from the population of cluster C. These data have been plotted with those of the 1964 event in the same figure (Fig. 12). It shows mostly **compressional** first-motions along the circumference with **dilatational** motions around the center and thus represents a normal **fault** mechanism.

In order to study the fault plane mechanism more closely, the **long-** period Rayleigh wave seismograms of **WWSSN** and SCN stations acquired in 35 mm or 70 mm films were analyzed. The phase velocities computed for wave travel paths between western Alaska and the worldwide stations computed for the solution No. 2 were utilized for Rayleigh wave studies. The focal mechanism solution represented by Rayleigh wave data was derived by computing the moment tensors (Patton, 1978; Suarez, 1982). The details of this study will be given elsewhere. The solution obtained is shown by the nodal planes a_1 and b_1 (Fig. 12).

It must be noted here that the focal mechanisms solution represented by moment tensors is completely independent of the first-motion data. However, this solution show good fit to the first motion data except to some of the **compressional** data in the northern azimuths. These first-motion data were measured for small earthquakes in the cluster c (Fig. 5).

Assigning **equal** weights to the local and **teleseismic** first-motion data, it **is seen** that two more solutions can be fitted to the data equally well. The nodal planes of these two later solutions are shown, respectively, by the nodal planes a2, **b₂** and a3, **b₃** in Fig. 12. However, out of the three possible solutions, which ever solution is preferred, from the dominance of **dilational** first-motions around the center, we interpret that the earthquakes in the cluster C are associated with normal faulting mechanisms. This interpretation of the focal mechanism is in agreement to the nearly vertical maximum (P) and horizontal minimum (T) stress axes, represented by the solution derived from moment tensors.

(e) Solution No. 5

The **plot** of the first-motion data is shown in Fig. 13. Three possible composite solutions are shown by three pairs of nodal planes (**a₁, b₁**; a₂, b₂; and a₃, b₃). Though, none of the solutions **are well** constrained by the data, **all** of them represent normal faultings as the principal type of **focal** mechanisms for **the** earthquakes in the cluster D.

(f) Solution No. 6

The solution is shown in Fig. 14 which is deduced from the **first-motion** data **for the** selected earthquakes **in** cluster E (Fig. 5). The data around the center were measured on the seismograms of WWSSN and SCN stations for the 1981 ($M = 5.2$) earthquake while those around the circumference represent **small** earthquakes in cluster E. Most of the **compressional** first-

motions around the center of Fig. 14 were noted from the ISC bulletin; they differ from the **dilatational** motions measured on the seismograms recorded by the **WWSSN** and SCN stations. Assigning zero weight to the **teleseismic** data reported by the non-WWSSN and **non-SCN** stations, we interpret that the solution represent normal faulting mechanism.

In addition to the above solutions, the first-motion data for the 1960 ($M = 5.75$) earthquake located in the southeast corner in Fig. 2 were noted from the ISC bulletin. The plot of these data are shown in Fig. 15 which appeared to be insufficient for drawing any **nodal** plane. However, from the concentration of **compressional** first-motions in the center, we infer that the above earthquake was associated with thrust faulting mechanism. The details of the solutions (Fig. 9-14) are given in Table 7.

VI DISCUSSION

Fisher **et al.** (1981) studied the geology of Norton Sound using multi-channel seismic, gravity and magnetic data. The traces of the major faults mapped by them, as mentioned before, have been incorporated in the structural compilation of Fig. 7. Due to the high scatter in the epicenters of earthquakes located on the south of Seward Peninsula (Fig. 5), we could not relate the earthquakes to any specific fault mapped by the above authors. Nevertheless, the dominance **of** normal faults as identified by them shows that tensional stress is the primary stress operative in the Norton Sound.

For the inland areas, a number of fault plane solutions could be obtained. With the exception of solution Nos. 2 and 6, the first-motion data for others show fit to more than a pair of nodal planes (**Figs. 9, 11, 12 and 13**). Despite this problem, the solutions show **normal** faulting as the principal component of focal mechanism. However, for the integration of

the tectonic framework of western Alaska with the neighboring areas, it is necessary to select one of the pairs of **nodal** planes for each solution and next to identify one of the nodal planes, which most likely, represents the **fault** plane.

The nodal planes of solutions Nos. 2 (Sykes and **Sbar**, 1974) and **6** are relatively better constrained by the first-motion data. For both these two cases, if we select the nodal planes dipping southwest at low angles as the fault planes, the horizontal projection of their slip vectors orient, approximately, in the southwest direction. This is roughly the direction of the absolute velocity of motion (≈ 2 cm/yr) of the overriding **plate** at the Aleutian trench as noted by **Uyeda** and **Kamamori** (1979). The identification of fault planes from the first-motion data on this basis seems logical as the back arc plate between the Aleutian trench and St. Lawrence Island in the north (Bering Sea) is largely **aseismic** and thus can be considered as rigid. The direction of motion of such a plate should be the same over its entire extent.

Following the above procedure, if the **NNW-SSE** steeply dipping nodal plane for the **Huslia** earthquake (solution **No. 1**) is chosen as the fault plane, the direction of the horizontal projection of the slip vector conforms to those obtained for Solution Nos. 2 and 6. Thus, using the same criterion, we have chosen the fault planes for solution Nos. 3, 4 and 5. The preferred solutions are identified in Table 7.

In order to illustrate the interrelationships of the preferred solutions, their plots along with the epicenters of all earthquakes compiled for western Alaska are shown in Fig. 16. The trends of the fault planes **together** with the **horizontal** projection of slip vectors are shown in Fig. 17. Some **identifiable** trends in epicenters are also shown in this figure.

With the exception of solution No. 4, the slip vectors of others more or less align in the same direction.

In Fig. 17, the average trends of B-axis (σH_{max}) for solution Nos. 1 and 6 and for solution Nos. 2, 3, 4 and 5 are shown by broken lines EF and CD, respectively. The line AB represents the average of the strike directions of normal faults mapped in the center and west of Norton Sound by Fisher et al. (1981). Similarly, GH represents the average trend for the strikes of normal faults and the directions of the **anticlinal** axes mapped by Ettreim et al. (1979) in and around Hope basin in Chukchi Sea. Thus, the line AB and GH may also be interpreted as the trends of σH_{max} . Moreover, the double broken line IJ, though located approximately, separates areas under tensional stress field from those under **compressional** stress. This separation is inferred from the first-motion data (Fig. 15) for the 1960 ($M= 5.75$) earthquake located near $62^{\circ}N$ and $154^{\circ}W$.

Nakamura et al. (1980) studied the **stress trajectories** for the Aleutian region from the characteristics of post-Miocene volcanoes and quaternary faults. Their results are reproduced in Fig. 18. A comparison of these results with those given in Fig. 17 shows that the location of the zone of transition in western Alaska from **compressional** to tension stress regimes is in good agreement. As regards to the stress trajectories (σH_{max}), the results of the present study show northwest orientation in and around Seward Peninsula and ENE in the Chukchi Sea in comparison to the westerly direction of Nakamura et al. (1980). But the two results (Fig. 17 and 18) have an important common feature, namely, the predominance of tensional stress for western Alaska. Note that the two studies are based on the analyses of different sets of data.

As discussed earlier, some uncertainties in fitting the first-motion data **with** the nodal planes remained. A somewhat larger error in the focal mechanism solutions might have been caused by the uncertainties in the velocity model adopted for the crust and upper mantle. Thus, the differences in the direction of stress trajectories noted above may not be considered as significant.

Uyeda and **Kanamori** (1979) and **Nakamura** and Uyeda (1980) **classified** the back arc region of the Aleutian trench as the **Mariana** type, i.e., actively opening without the formation of new crust. However, they did not identify any specific area in the back arc region as the zone of opening or spreading. On the other hand, in view of the predominance of normal faults, current southward motion along some of these faults as shown by focal mechanism solutions and trends in earthquakes, it seems logical to locate the above zone of spreading through Seward Peninsula on the west of 155°W,

VII. CONCLUSION

Within the last 25 years, the strongest instrumentally recorded earthquake in western Alaska was a magnitude 7.3 earthquake, located near **Huslia** in the **Koyukuk** River basin. Several earthquakes of magnitude greater than 5.0 have occurred on and around the Seward Peninsula with four events located about 400 km offshore in the Chukchi Sea. Because the areas around the epicenters of these earthquakes are thinly populated, their seismic impact passed largely undocumented.

Crustal earthquakes commonly migrate with time **along** a fault or fault system. This means that if a given section of an active fault yields (resulting in an earthquake), then at a later time a somewhat distant point of the same fault may yield to accumulated stresses. This **points** to the necessity of determining the trend of the faults both in offshore and

onshore areas for an appropriate geohazard assessment for an area.

Since the installation of a local seismographic network, several hundred earthquakes, predominantly of **crustal** origin, and in the magnitude range of $2.0 < M_L < 5.2$ have been located. Despite location uncertainties due to unknown crust-upper mantle velocity structure, the epicenters of these earthquakes are found in some cases to follow closely some traces of mapped faults. Some of these seismic trends traverse the **epicentral** areas of the past strong earthquakes.

Studies of fault plane solutions for a few selected earthquakes and clusters of small earthquakes located inland show that normal faulting as the principal mode of strain energy release in western Alaska.

Supplementing the fault plane solutions with the trends of mapped offshore faults and **anticlinal** structures, trajectories of the maximum horizontal stress operative in western Alaska are obtained. The zone of transition from the **compressional** to tensional stress fields appear to lie in the southeastern part of the study area. These features are more or less in agreement to those given by Nakamura et al. (1980).

From the above results, we postulate that the areas in and around Seward Peninsula represent the active break arc spreading zone of the Aleutian subduction processes. From the trends of earthquakes located in northeast Siberia (Wetmiller and Forsyth, 1978), it appears that the zone of spreading extends from western Alaska through the southern part of the Chukchi Sea further northwest along the coast of Chukotsk Peninsula up to about 170°E . Moreover, we interpret that the earthquakes located in the above zone, including those in western Alaska are the direct consequence of southward spreading of the back arc rigid lithospheric plate. The largely aseismic Bering Sea lying between the trench and the above spreading

zone constitute the largest part of the rigid plate. Since no **large** scale volcanism is in evidence in the spreading zone, the formation of new crust along it need to be ruled out.

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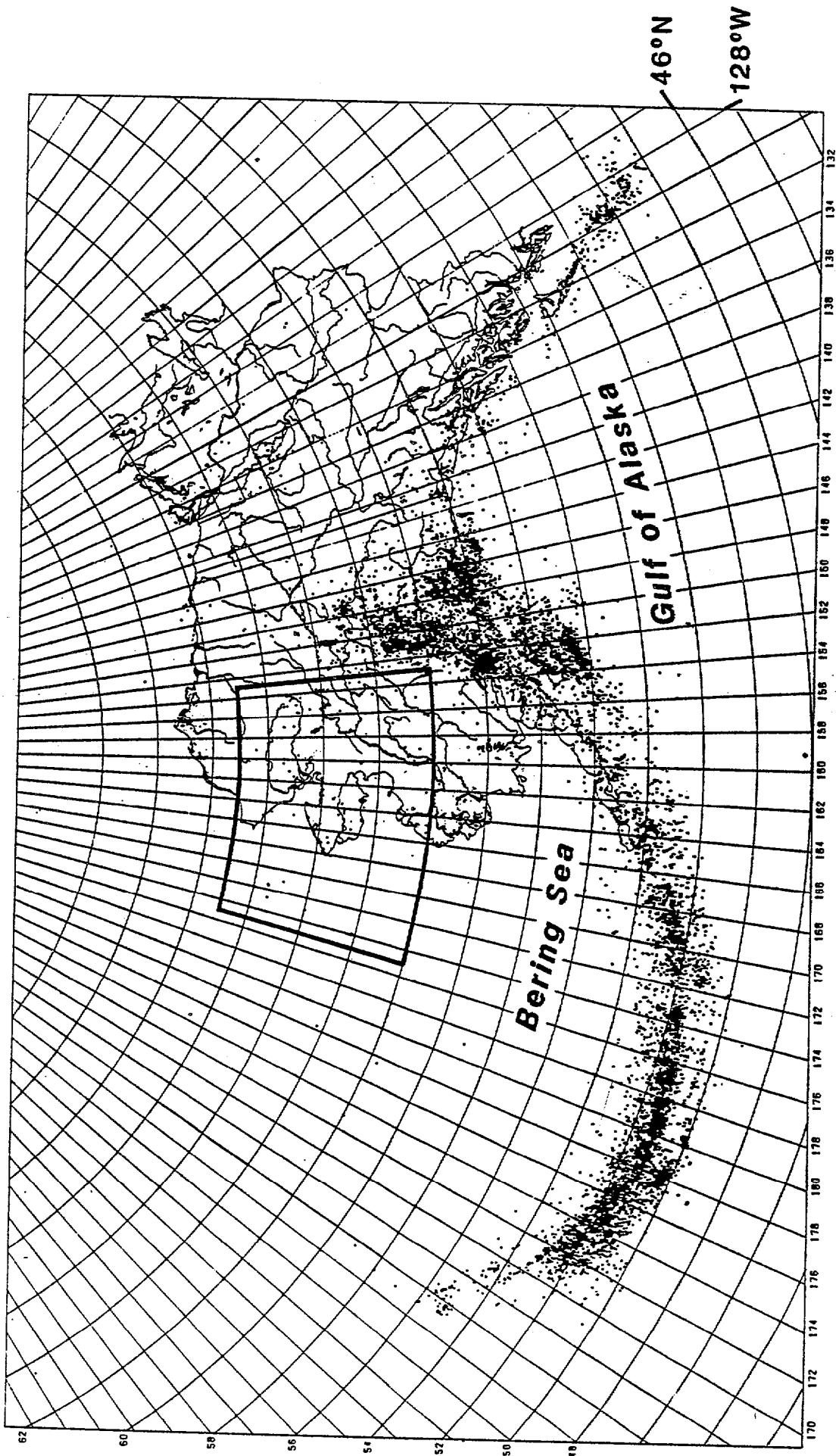


Figure 1.

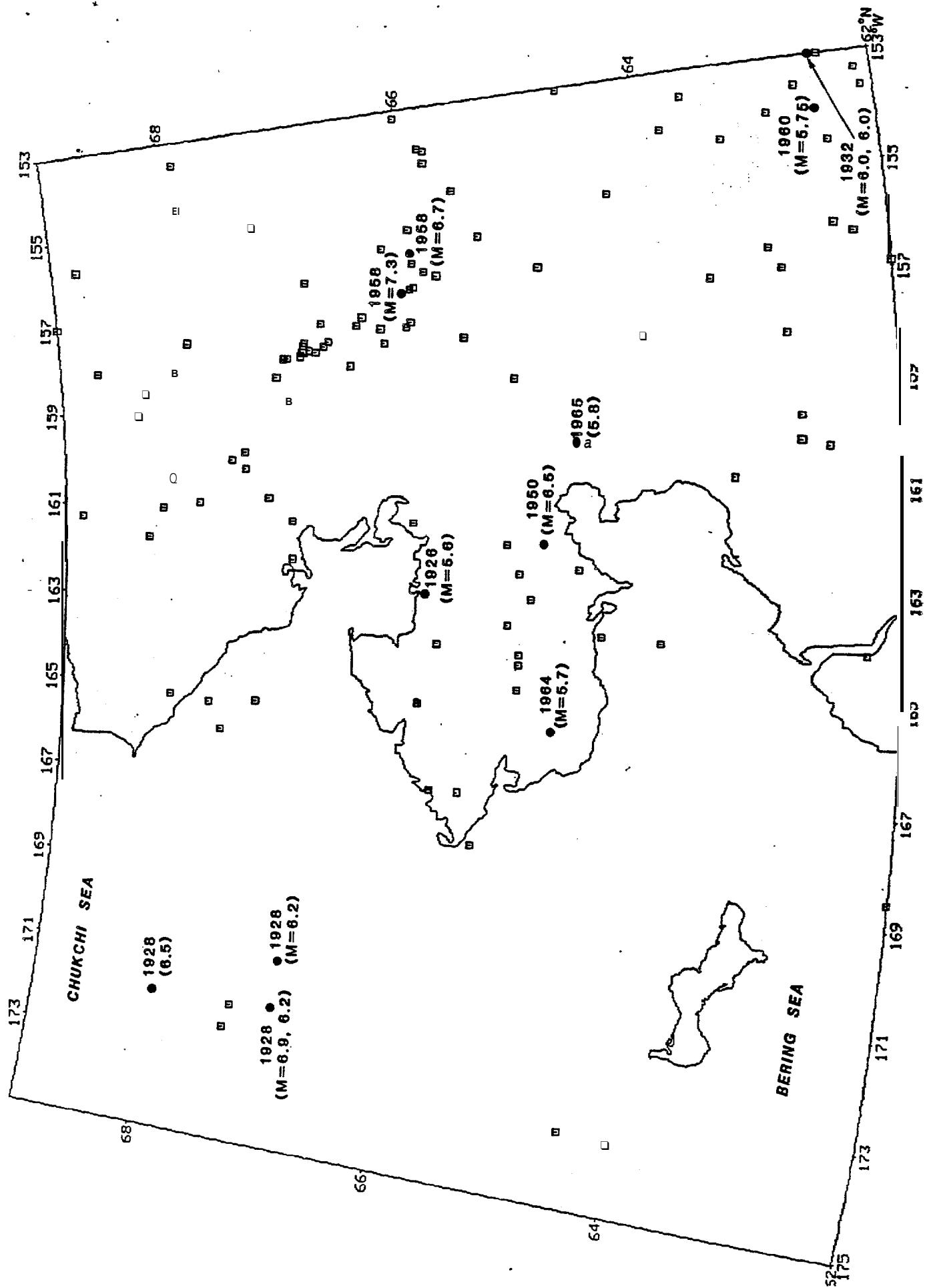


Figure 2.

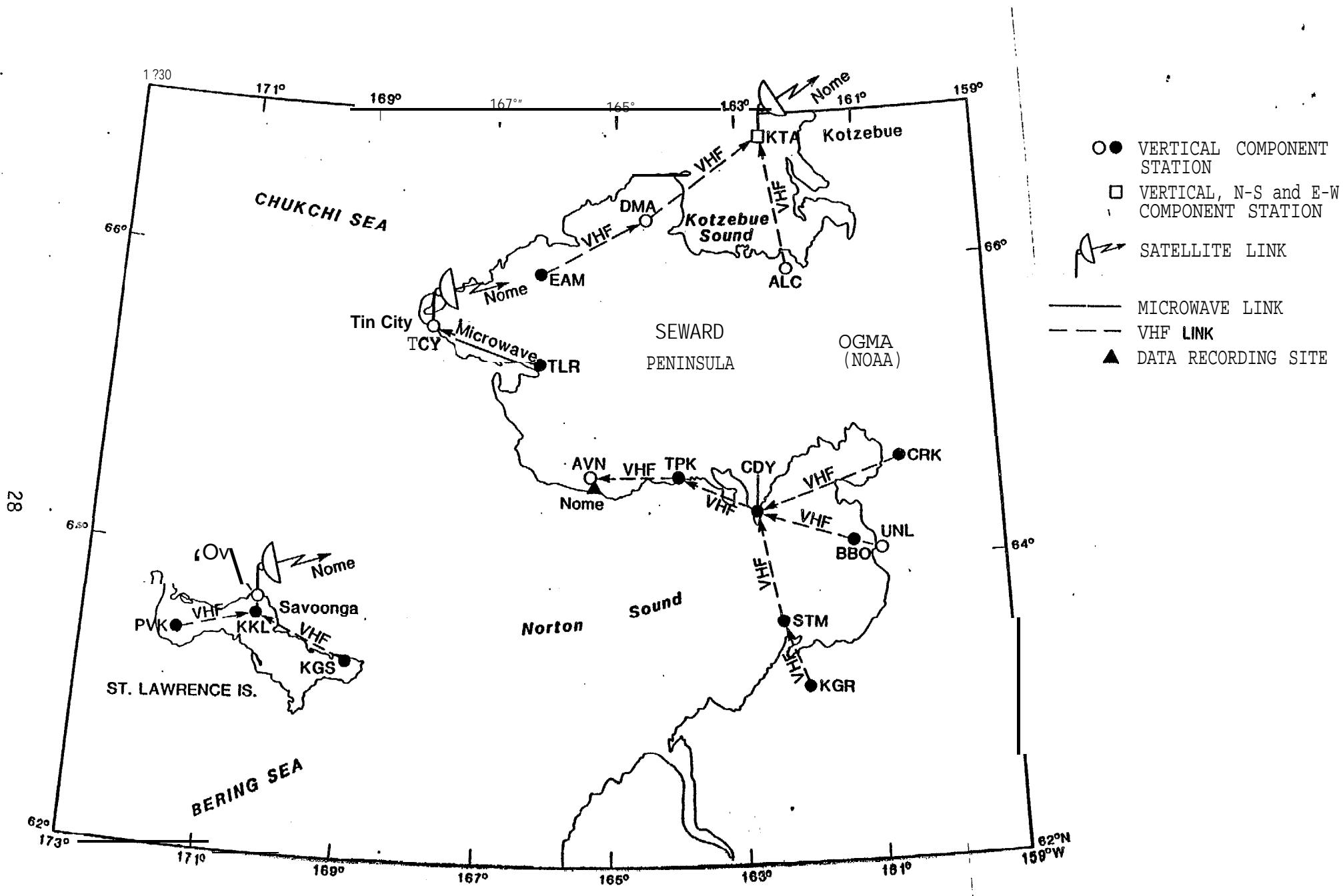


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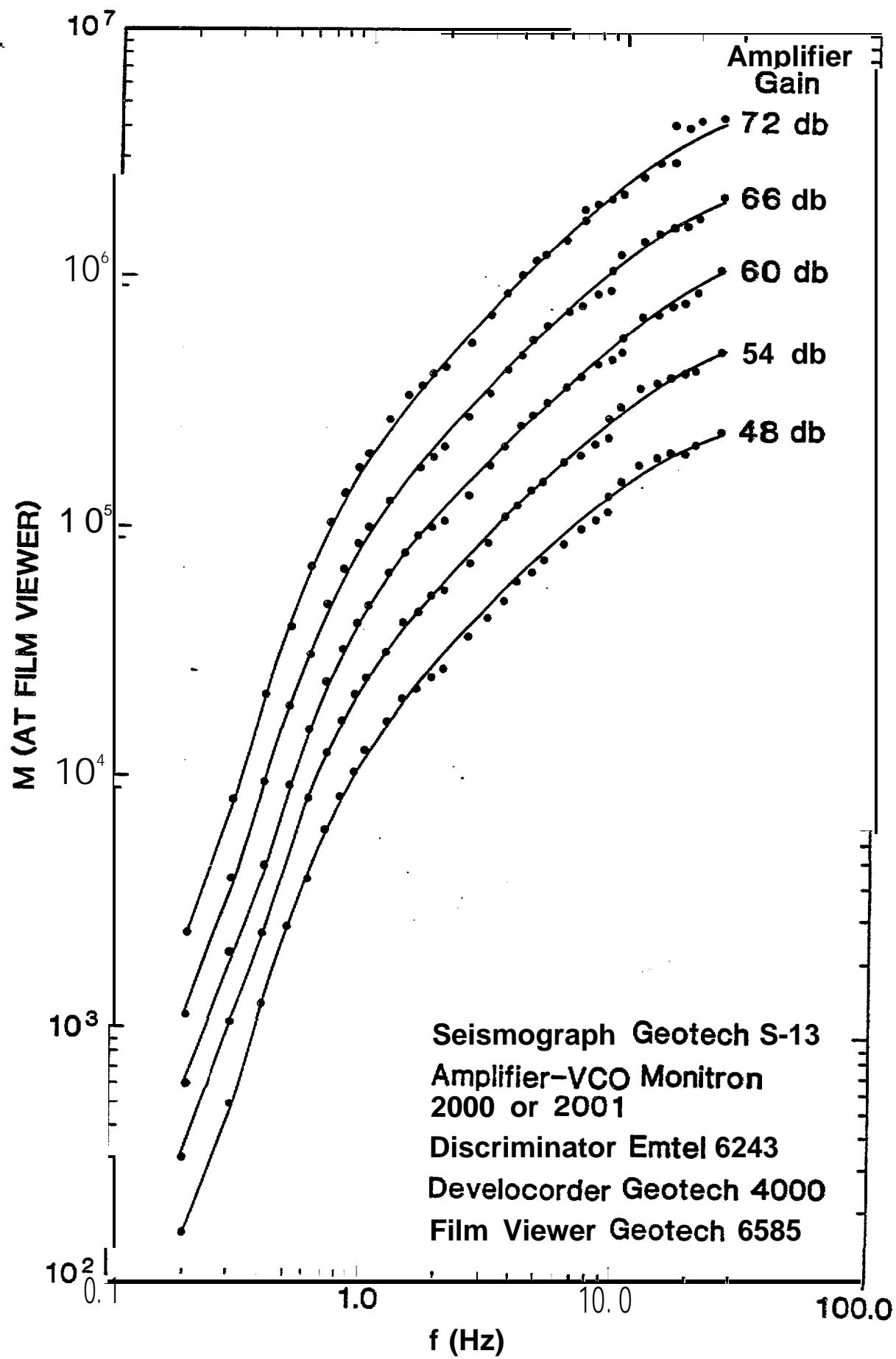


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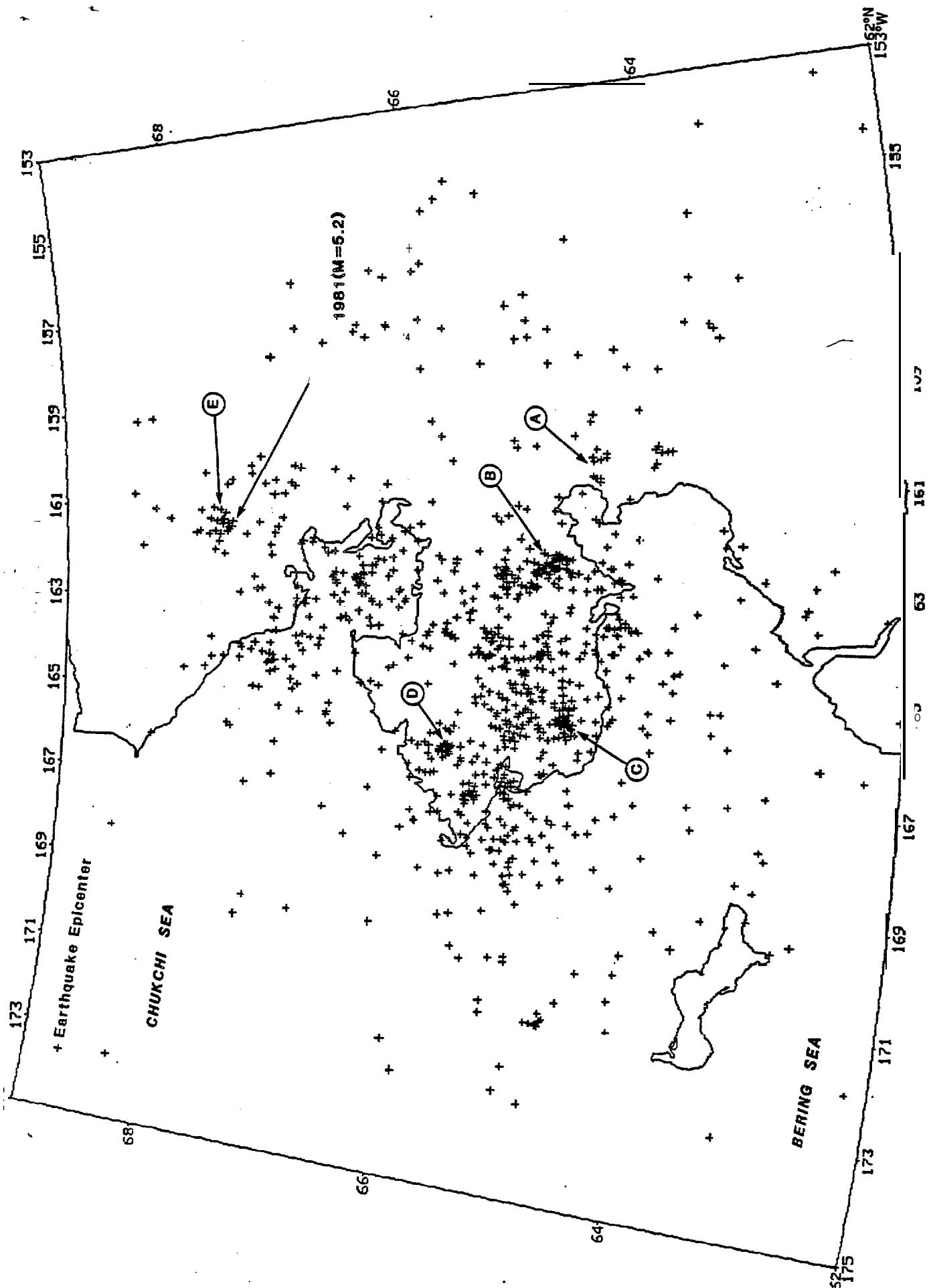


Figure 5.



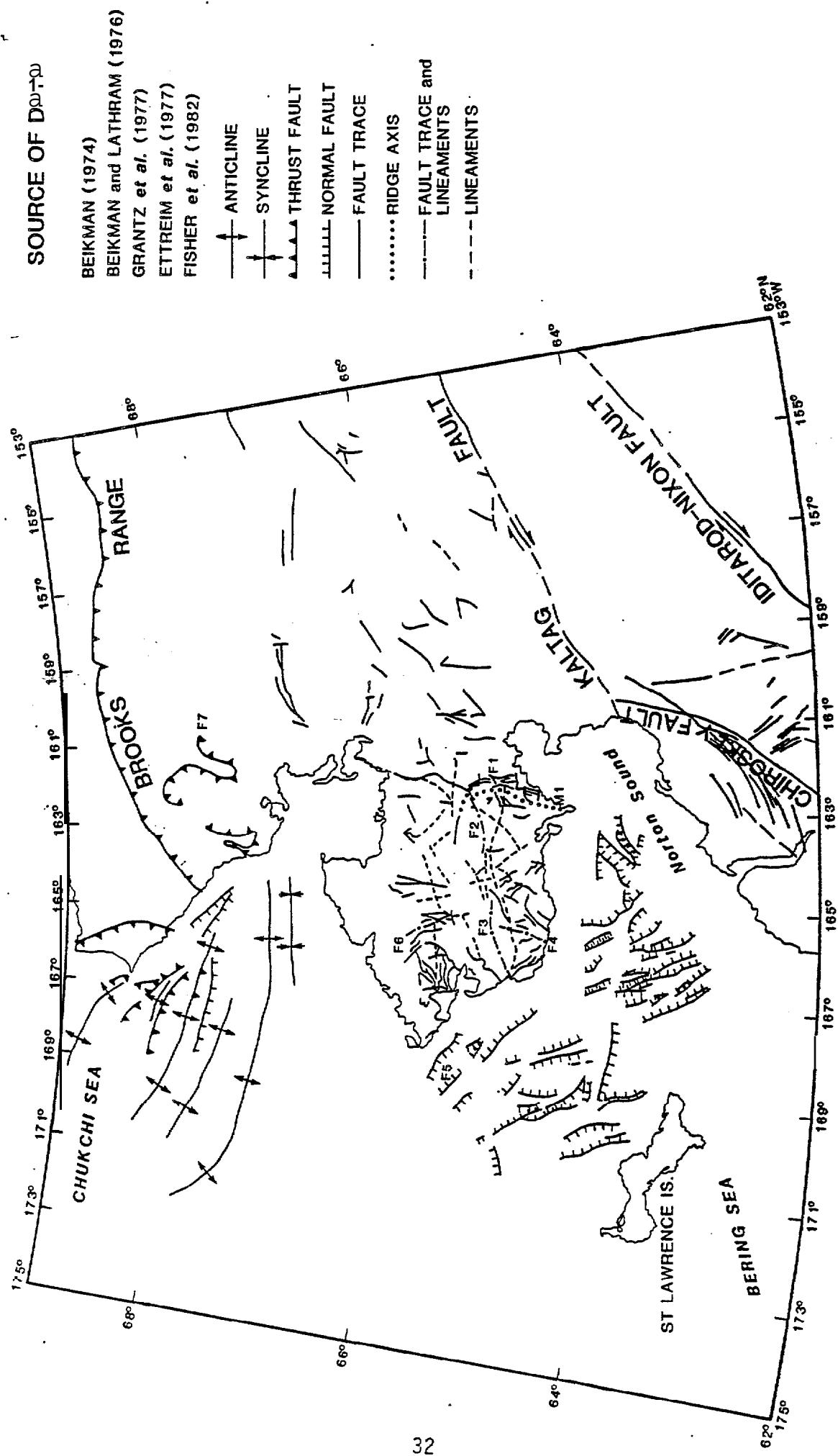


Figure 7.

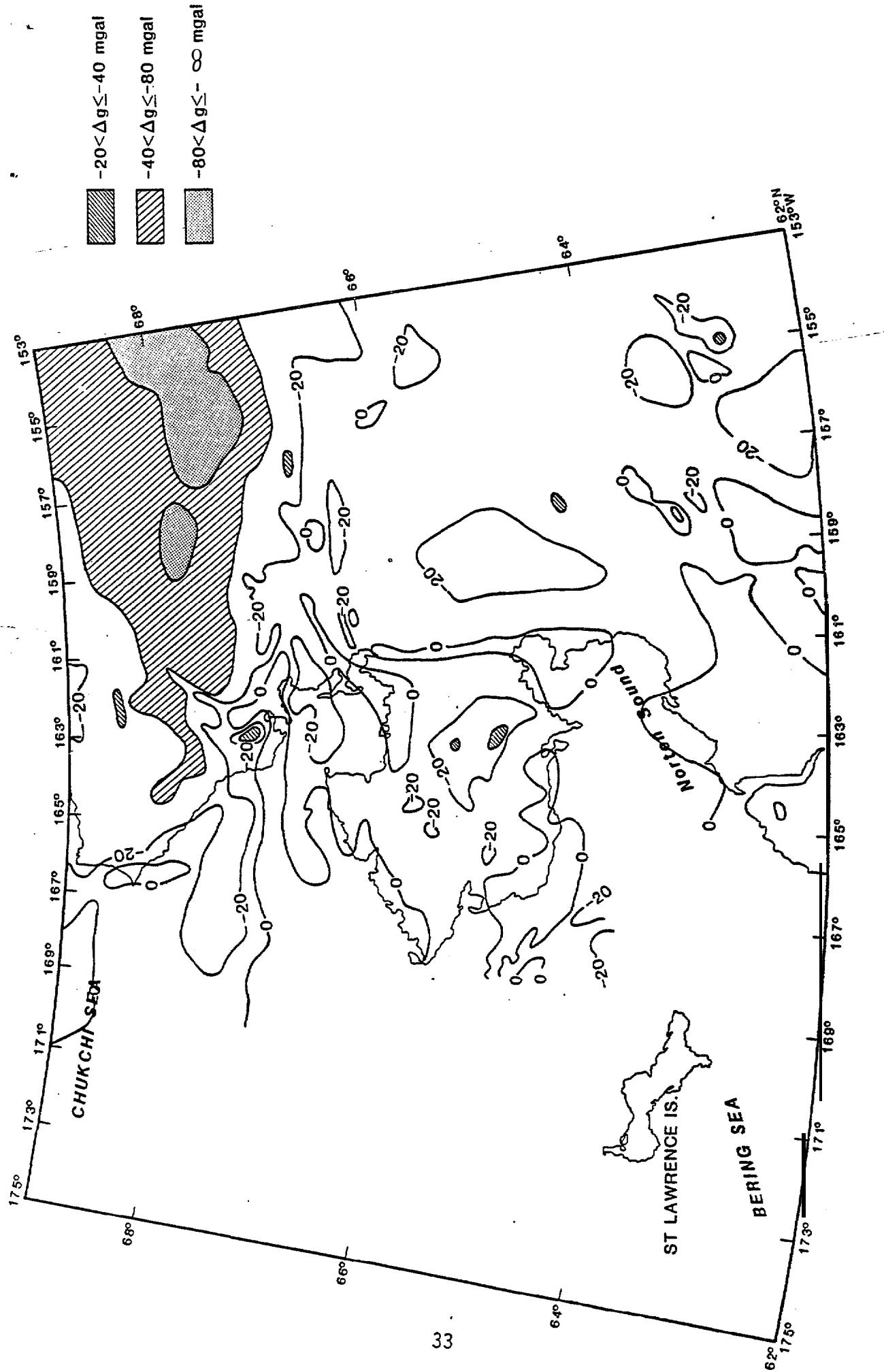


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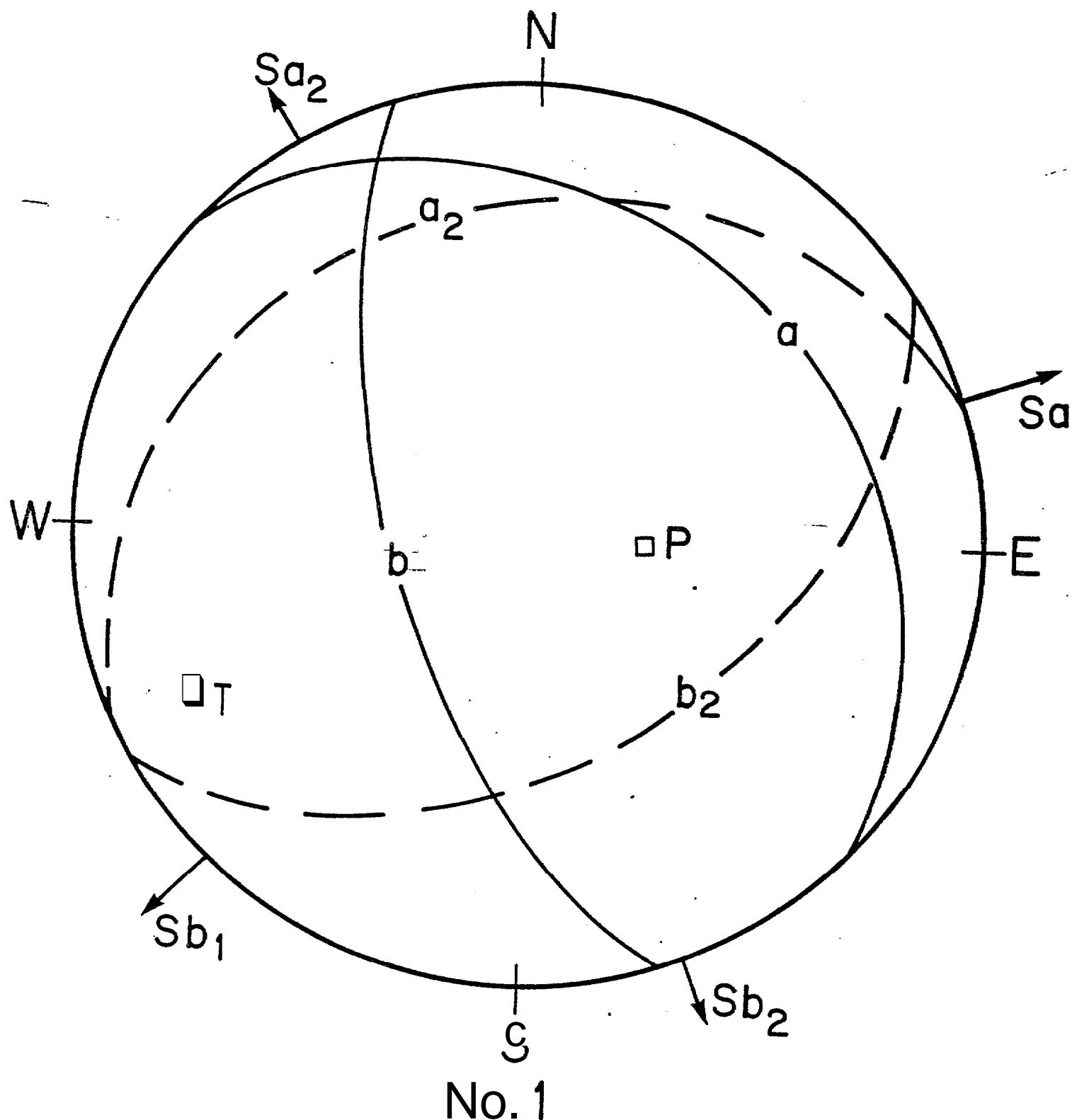


Figure 9.

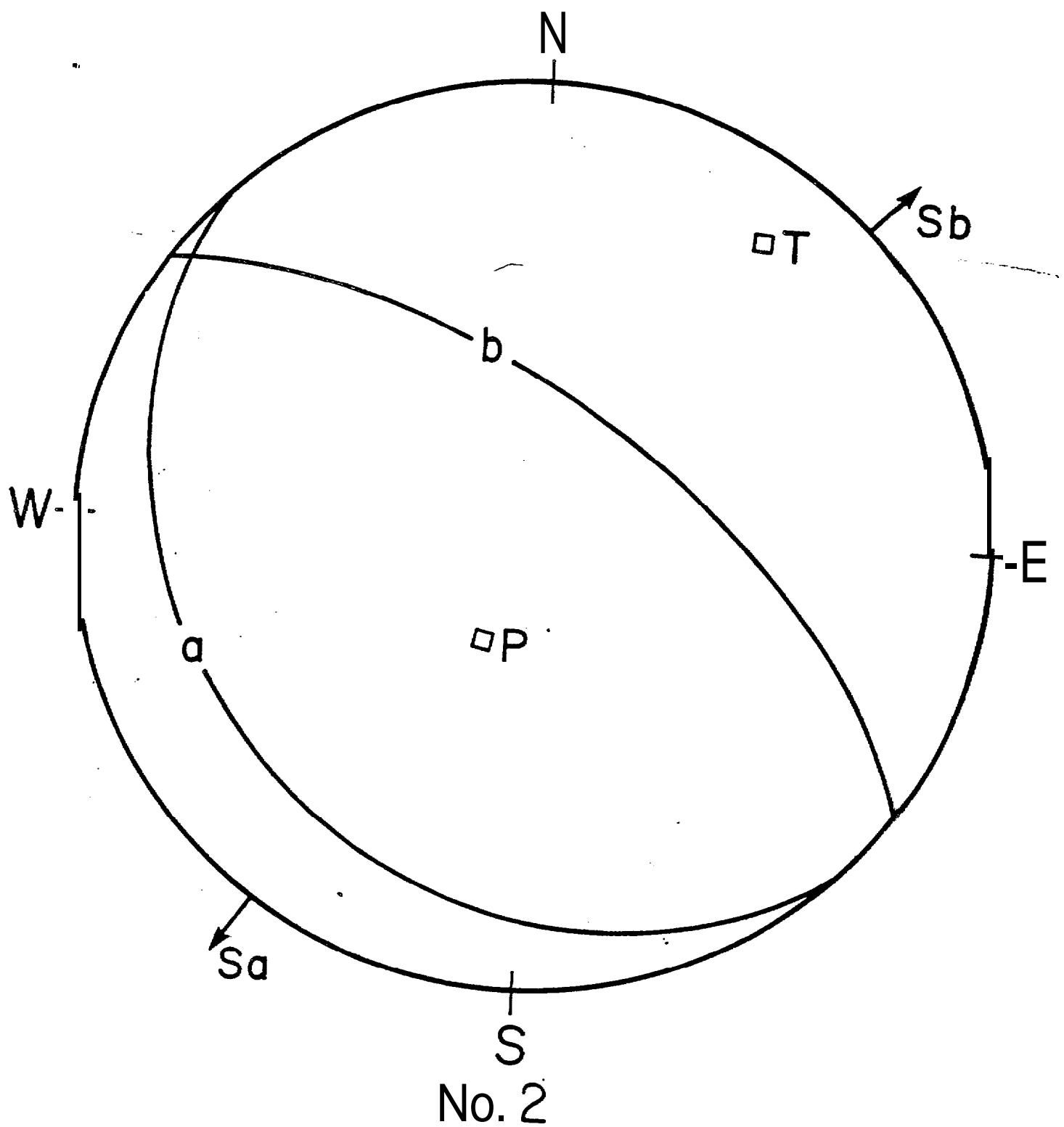


Figure 10.

- COMPRESSION
- DILATATION

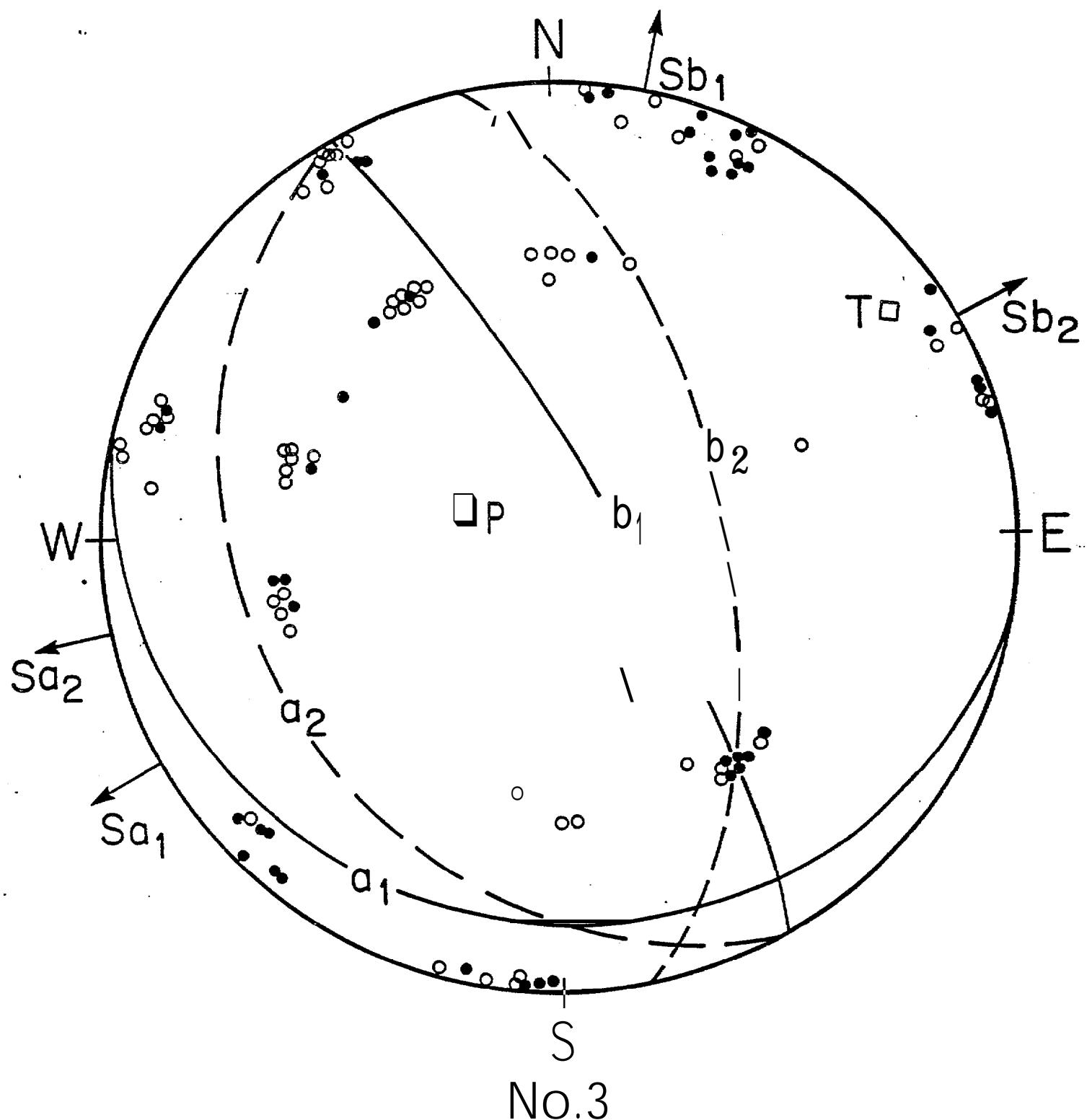


Figure 11.

● COMPRESSION
○ DILATATION

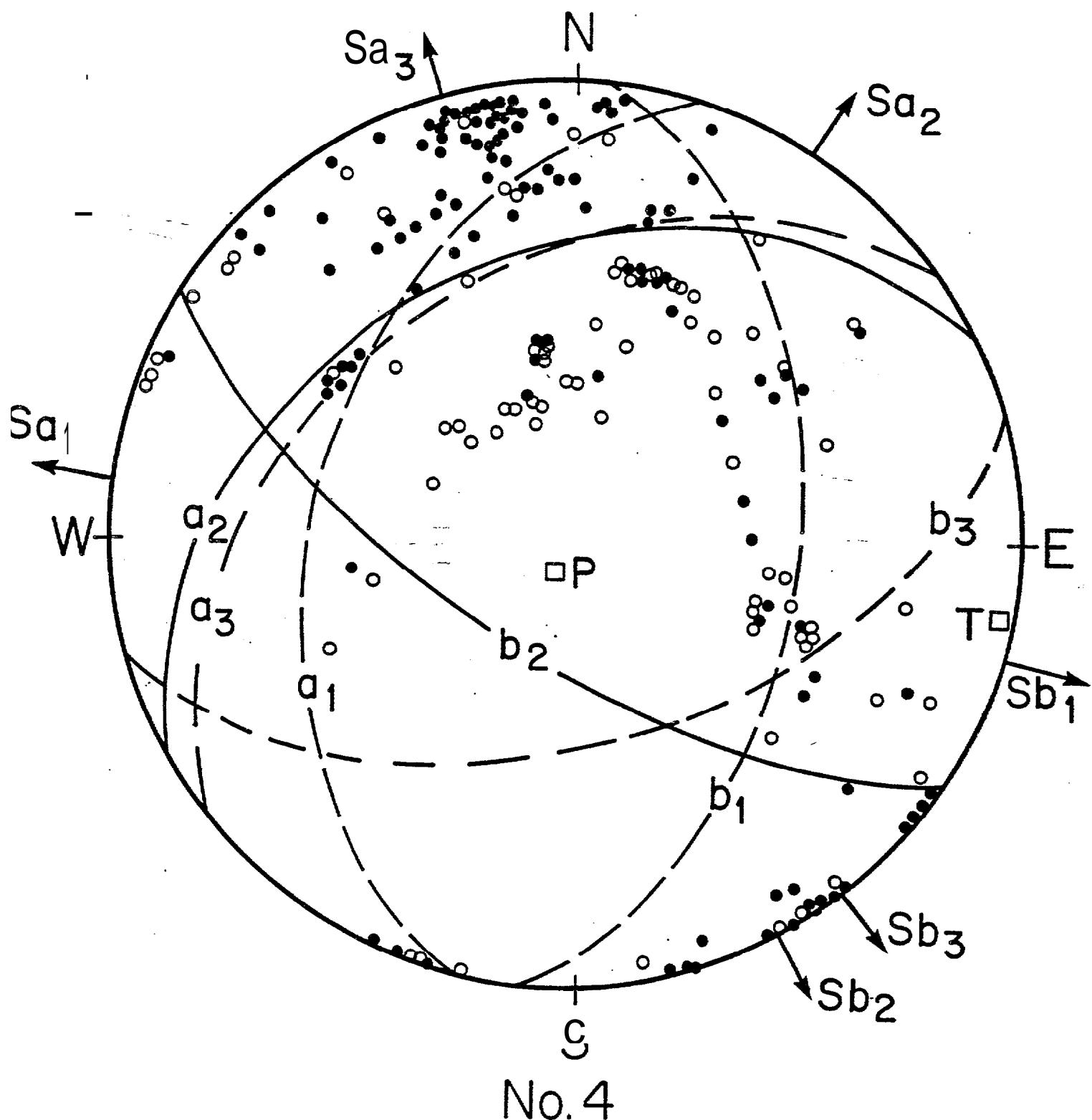


Figure 12.

• COMPRESSION
◦ DILATATION

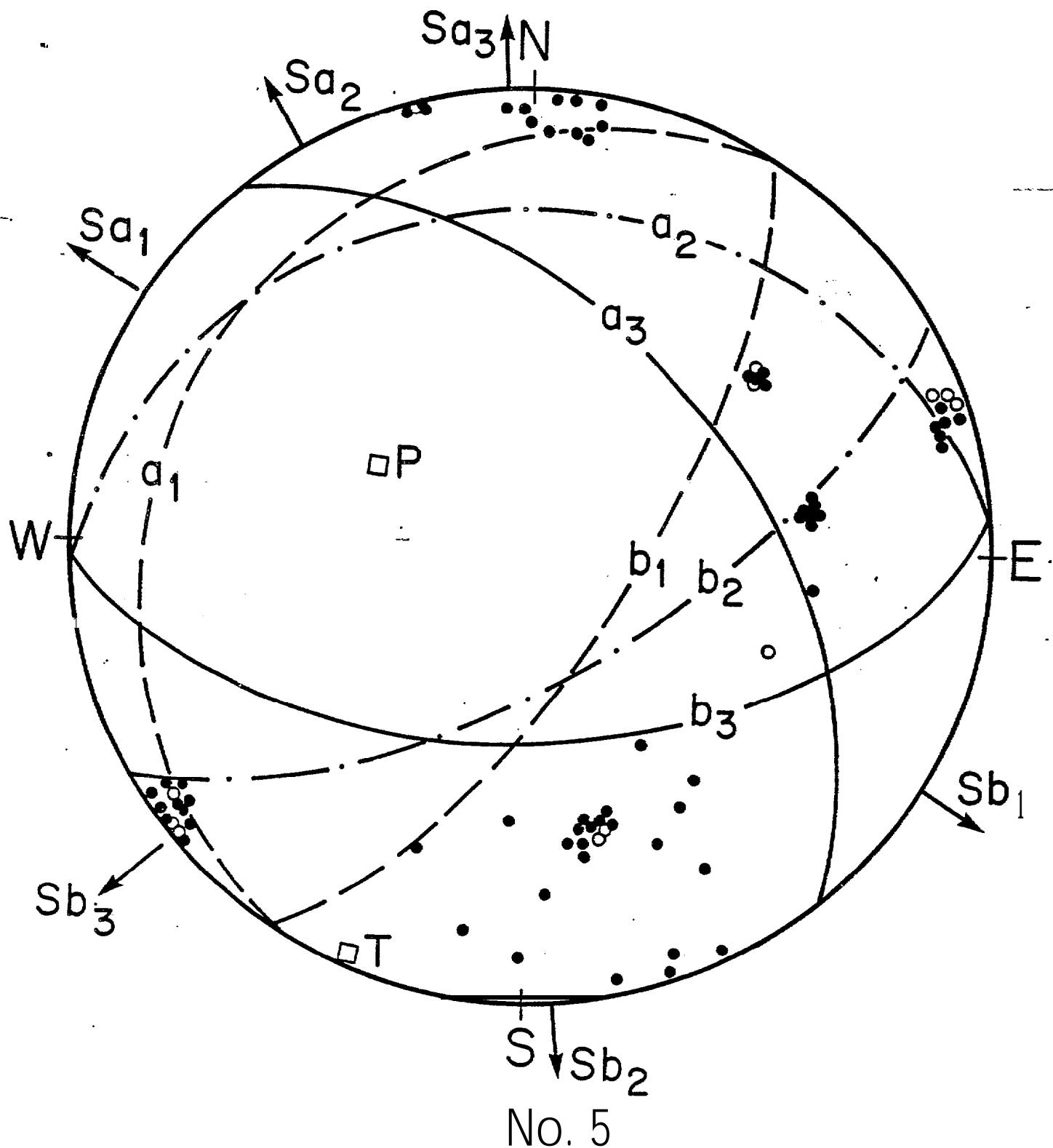


Figure 13.

• COMPRESSION
○ DILATATION

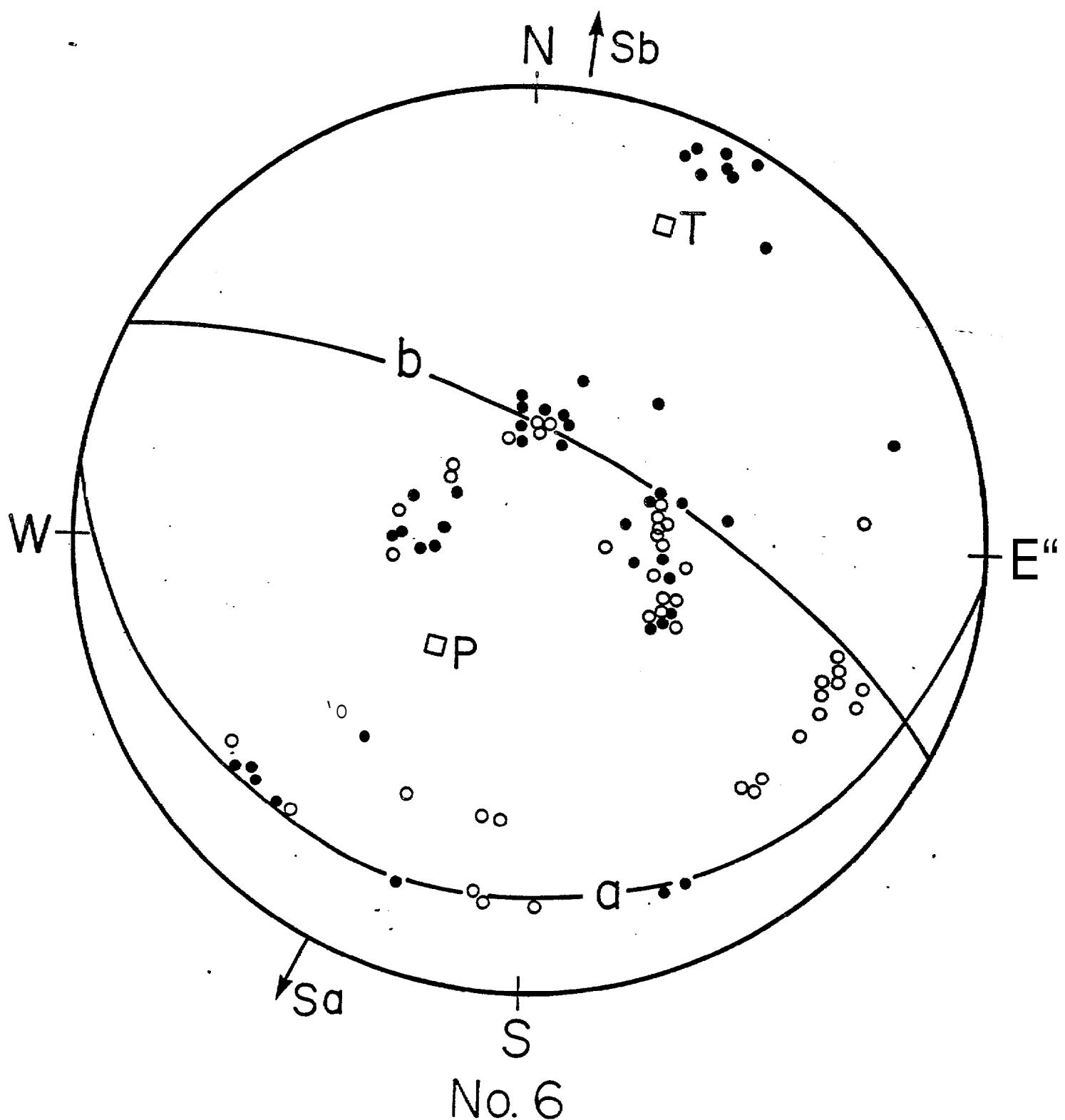


Figure 14.

• COMPRESSION
○ DILATATION

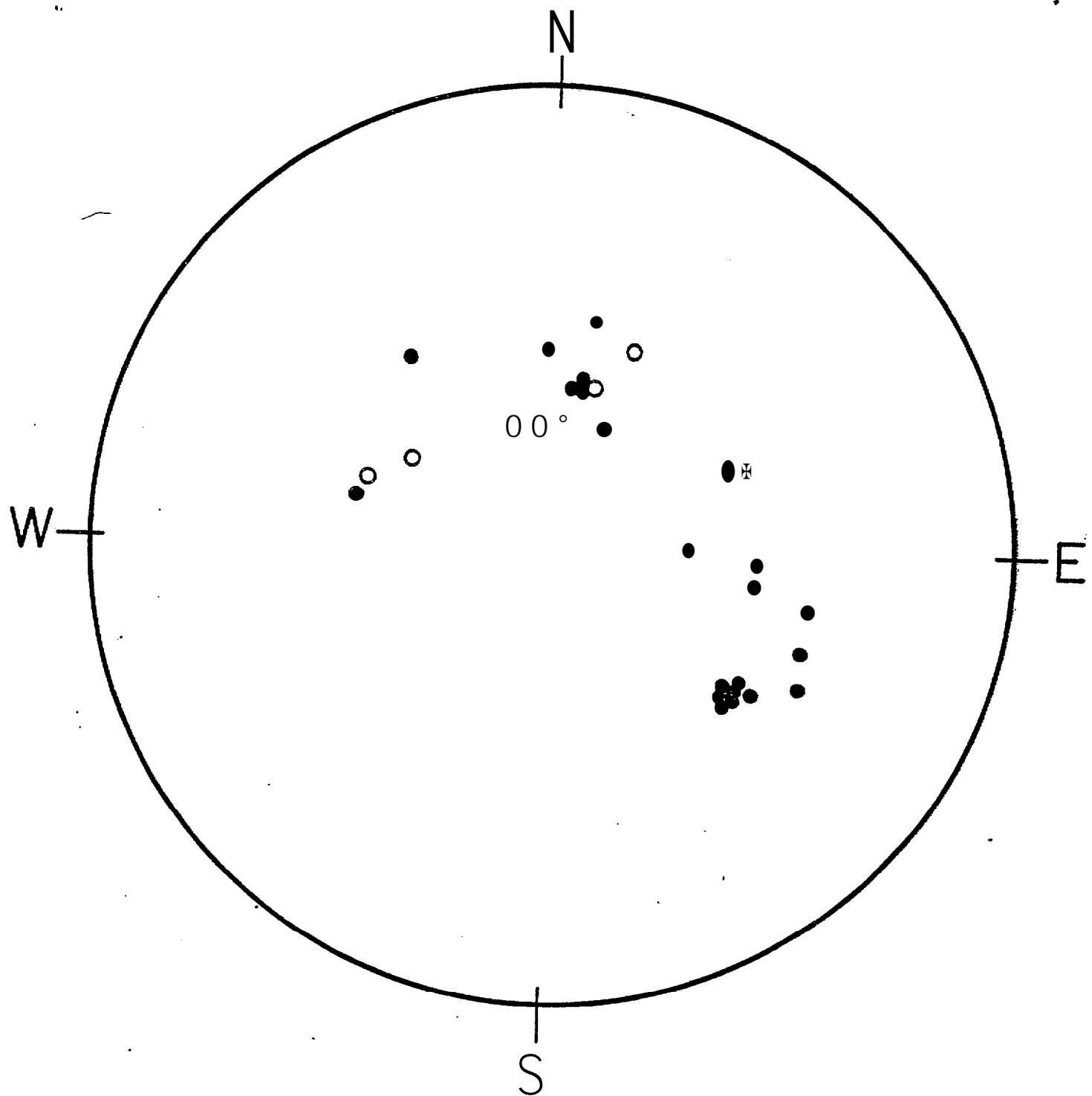


Figure 15.

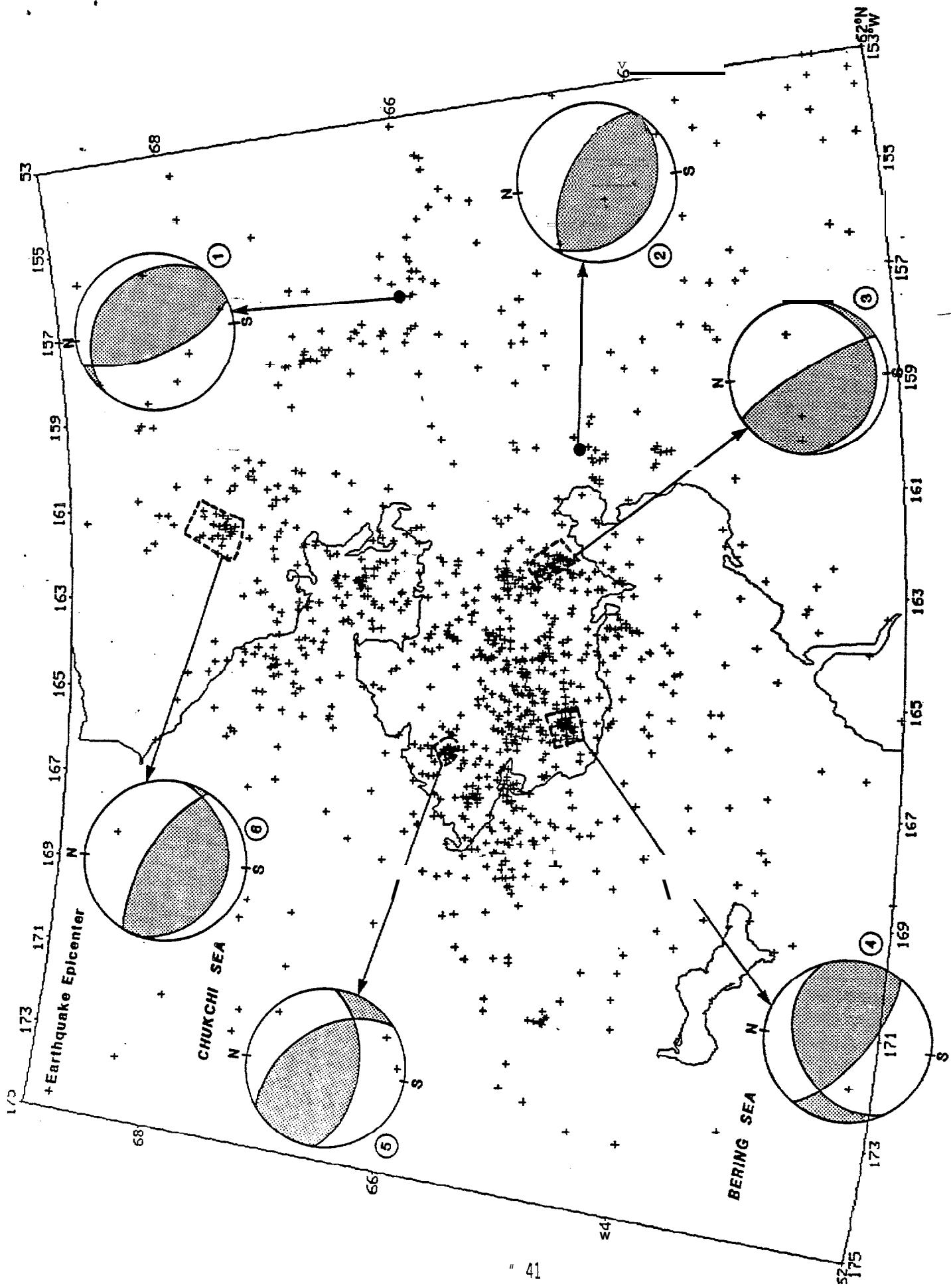


Figure 5.

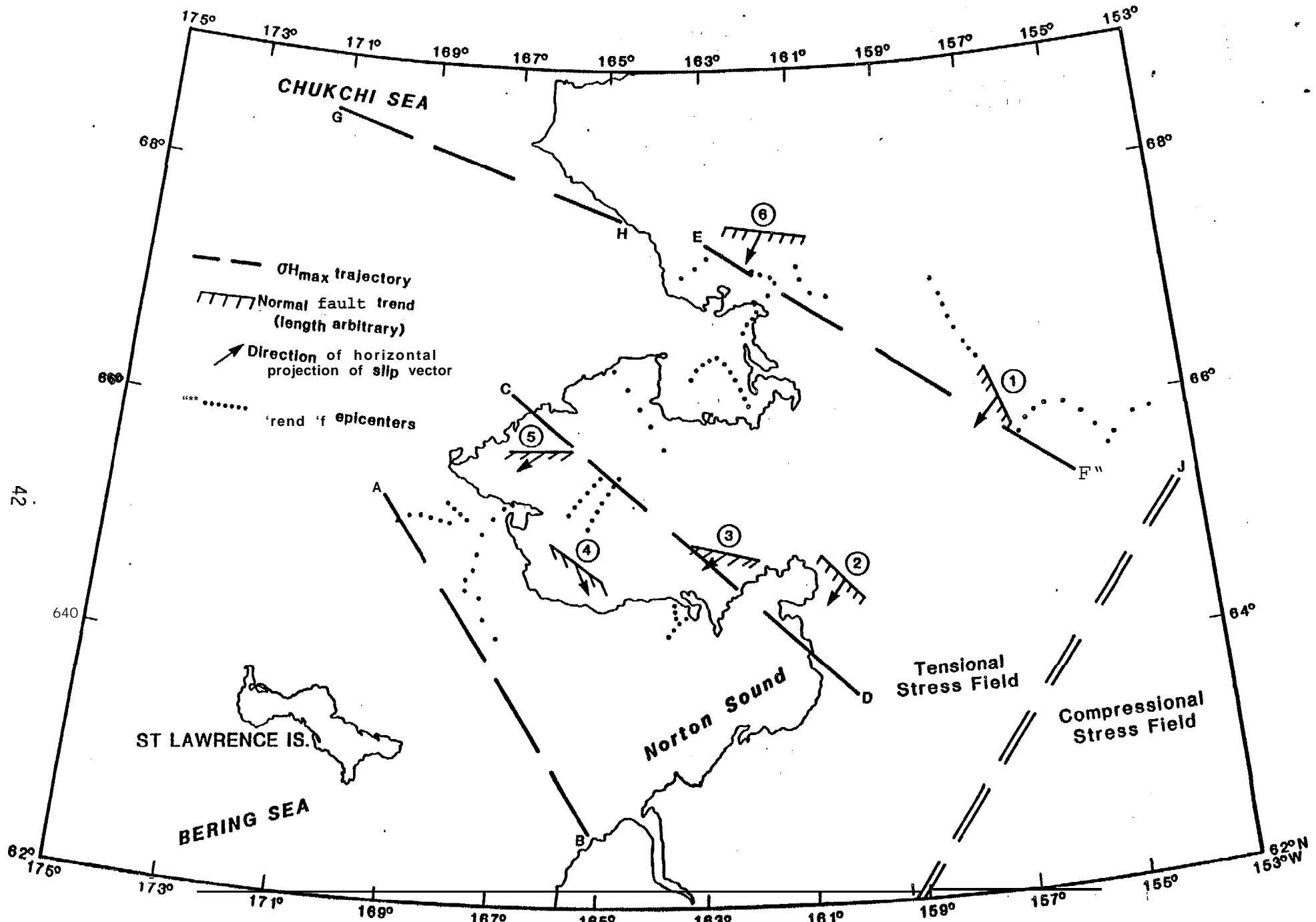


Figure 17.

Figure 18.

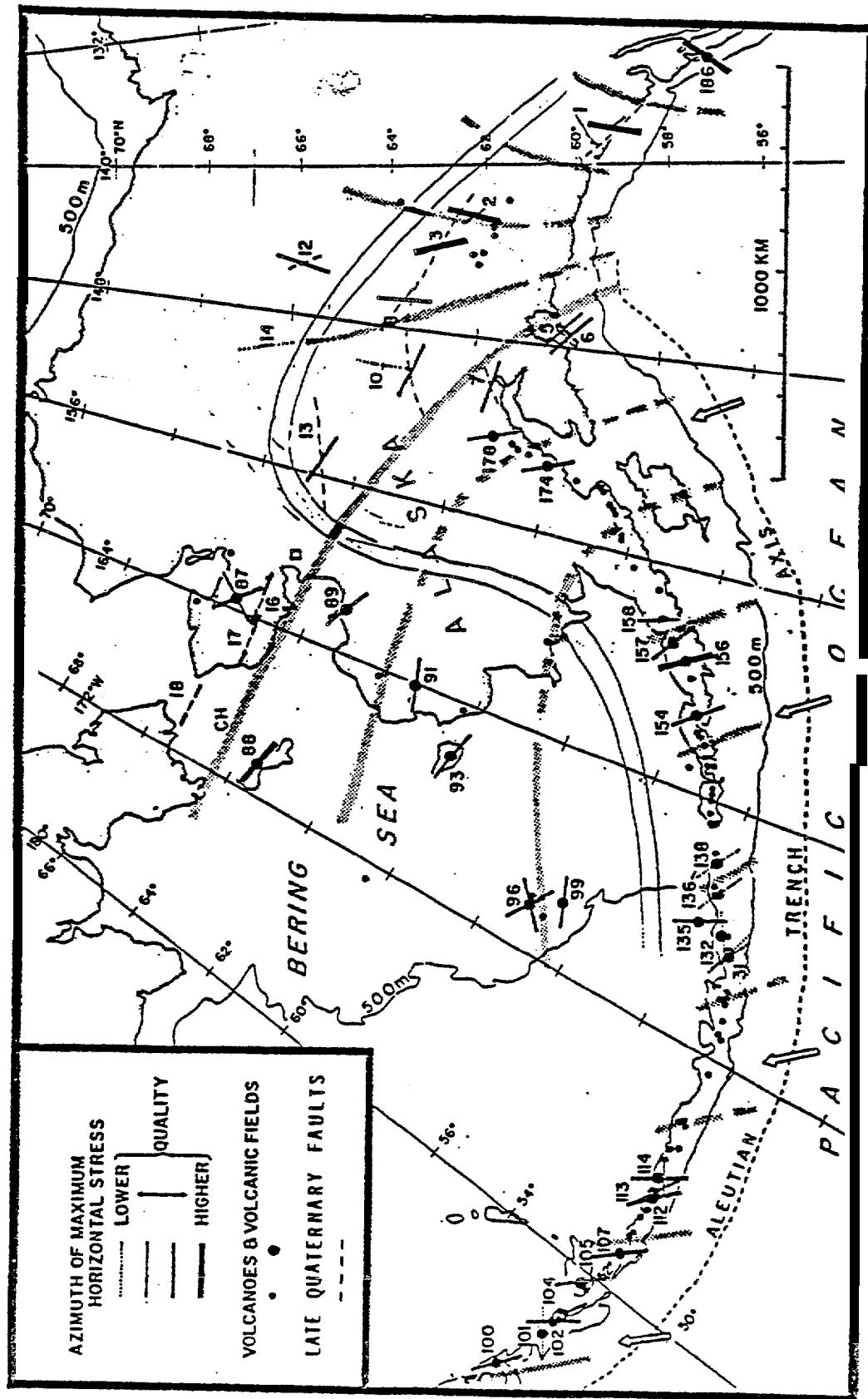


TABLE 1

Src	Yr	Mo	Dy	Hr	Mi	Sec	Lat	H	Long	H	Depth	M1	Src	Mc	Src	Mb	Src	MsA	Src	Map	I Codes	FLR	CED	No	ERH	ERZ	RMS	GAP	DMIN
EPB19700212061	130.00			67.	670N	166.060W	18.0	4.40																5	24.	3	1.8		
GIA19700406052742.	2	65.	200N	162.600W			4.	90GIA																11			0.60		
NAK19700704234711.	20	67.	200N	158.400W	15.0		4.	50GIA															6			0.2			
GIA19700828205927.	2	62.	900N	156.900W	50.0		4.	20GIA															3			0.40			
GIA19701207214330.	9	62.	900N	15E.100W	00.0		4.	00GIA														11			5.60				
NAK19701218051940.	80	66.	900N	156.400W	50.0		4.	10GIA														8			1.0				
NAK19710209233112.	10	67.	900N	153.500W	15.0		4.	20GIA														4			1.5				
NAK19710405145306.	50	66.	800N	157.300W	00.0		5.	30GIA														7			0.2				
EPB19710406205809.	00	66.	240N	155.840W	18.0		4.20															3	14.0		0.7				
EPB19710415204827.	00	68.	180N	161.150W	18.0		4.00															4	16.7		1.0				
EPB19710416013904.	00	67.	880N	161.060W	18.0		4.20															4	4s. 7		2.6				
NAK1971042001	1753.30	66.	300N	157.500W	40.0		4.	00GIA																					
NAK19710422194539.	60	68.	100N	160.500W	40.0		4.	50GIA																					
GIA19710425034224.	2	63.	BOON	154.100W	50.0		4.	20GIA															8			3.70			
GIA19710429152955.	1	62.	300N	164.000W	00.0		5.	00GIA														6			0.90				
GIA19710819222047.	6	62.	600N	160.200W	00.0		5.	20GIA														7			2.20				
GIA19710906004711.	3	65.	200N	158.700W	00.0		4.	20GIA														7			0.40				
ISC19711005014041.	57	67.	375N	172.575W	33.0																								
NAK19711124041253.	90	67.	300N	155.100W	62.0		4.	50GIA														5. 20							
NAK19711209173150.	10	67.	900N	154.50014			4.	30GIA																					
GIA19711224175940.	3	63.	000N	156.500W			4.	00GIA														5			1.3				
NAK1972020112835.	00	67.	130N	151.3.010W	00.0		4.	30GIA														5			1.70				
NAK19720306191726.	00	66.	960N	157.760W	50.0		4.	00GIA													14			0.4					
NAK19720419071611.	20	66.	970N	157.890W	00.0		4.	20GIA													17			0.8					
NAK19720421054122.	90	66.	860N	157.920W	75.0		4.	00GIA													16			o.&					
NAK19720512065256.	80	66.	950N	157.700W	40.0		4.	50GIA													14			0.7					
ISC19720618120908.	03	62.	426N	153.011W	27.0																20			1.0					
NAK197208030501055.60	66.	450N	157.230W	00.0	4.10G1A																	4. 70							
NAK19721003031E45.60	66.	790N	157.S10I4	79.0	5.10G1A																	1	71	6. 4	6.2	222.9			
ISC19721004054108.73	62.	813N	159.638W	33.0																		11			1.7				
GIA19721022194055.	162.	820N	160.080W		4. 80GIA																	4. 00			0.9				
ERL19721115154056.	00	67.	491N	159.994W	33.0																								
ERL19721204084321.	20	67.	495N	160.333W	10.0																	4.80							
NAK19730205173556.	00	66.	990N	157.980W	00.0		4.	50GIA													4.30								
NAK19730322020507.50	68.	860N	161.290W	00.0	4.20GIA																	14			2.30				
NAK19730326074632.	90	67.	300N	161.000W	44.0		4.	30GIA													676	N 010							
ISC19730411051218.	09	64.	614N	160.043W	15.0																1	24	10. s		222.9				
NAK19730612121010.10	68.	370N	159.090W	00.0	4.10G1A																15								
GIA19730623235238.	265.	840N	153.840W	50.0	4.10QIA																7			1.6					
NAK19730801110523.30	68.	690N	158.080W																		10			0.30					
NAK19730811171348.	90	66.	580N	158.250W	50.0		4.	30GIA													5			0.3					
NAK19730911090212.80	66.	280N	157.820W	00.0	4.00GIA																15			0.9					
ISC19731005092211.	87	66.	027N	156.736W	68.0																676	30	25.8		111.5				
NAK19731005094034.90	66.	750N	157.710W	75.0	5.00GIA																18			1.0					
NAK19731006020451.50	66.	960N	157.900W	00.0	4.90GIA																12			0.5					
NAK19731120024117.	60	67.	780N	165.440W																	8			1.9					
NAK19731211092330.	10	66.	910N	157.870W	00.0	5.	10GIA													15			0.6						
GIA19740219210232.	365.	990N	156.200W	40.0	4.30121A																18			1.70					
ISC19740414154314.	57	64.	458N	173.509W	46.0																671	51	22.7	14.0	557.4				
ISC19740415022937.	1264.	032N	173.594W	33.0																	671	22	23.6		557.4				
GIA19740526005733.	56	64.	944N	156.507W	39.5	4.	95GIA														4			1.10	336				
ISC19740811125749.	15	66.	030N	165.263W	33.0																16	22.3			405.1				
LAR19740928033947.	8262.	452N	156.122W	50.1																	676	25.0	25.0	0.03	314				
NAK19741021013137.	16	68.	041N	158.146W	34.0	4.	75GIA														4	25.0	25.0	0.40	322.				
LAR19741021221325.	32	62.	141N	153.331W	69.4																4			0.8	293				
GIA19741109154522.	15	62.	422N	154.594W	05.7	4.	19GIA													9	23.6	25.0	1.15	320					
ISC19750208113959.	9567.	600N	160.137W																	676	8	27.5	24.7	0.40					
																				17	53.9			222.3					

Src	Yr	Mo	Dy	Hr	Mi	Sec	Lat	H	Long	H	Depth	MI	Src	Mc	Src	Mb	Src	MsA	Src	Map	I Codes	FLR	CED	No	ERH	ERZ	RMS	GAP	DMIN
NAK197504060622	31.	73	66.	04	3N	157.	40	W	22.	4	4.0	5GIA											6	34.3	123.3	0.2	200	168.7	
LAR197511270014	22.	25	62.	10	5N	153.	64	6W	85.	0			4.	10LAR										8	12.7	23.7	0.70	317	199.
NAK197601041551	11.	94	66.	01	3N	153.	16	7W	5.0	4.	23	GIA											3				188	24.0*	
GIA197601220813	19.	75	63.	38	6N	160.	74	9W	45.	6	4.	13GIA											4				1.08	245	228.9
GS 19760127052717.	60	64.	61	8N	153.	06	2W	33.	0	4.	20	PMR		3.	9								901	15					
.GIA19760313231042.	74	67.	92	4N	157.	51	6W	50.	54.	87	GIA											5	10.8	4.9	0.19	287	266.2		
LAR19760406133940.	43	62.	64	2N	153.	54	2W	64.	0				4.	10LAR										5	17.2	19.7	0.16	298	277.
GIA19760407225259.	79	65.	80	7N	154.	13	7W	17.	1	4.	50	GIA											7	22.2	9.0	0.54	240	35.9	

TABLE 2

<u>Station Name</u>	<u>Code</u>	<u>Lat. (N) Degree</u>	<u>Long . (W) Degree</u>	<u>Elevation M</u>	<u>Satellite Time Delay (sec)</u>	<u>Site Geologic Formations</u>
Alder creek	ALC	66° .62	141.01	582		Permafrosted Metamorphic (Pre-Cambrian)
Anvil Mt.	AVN	64. 56	165.37	323		Metamorphic (Lower-Middle Paleozoic)
Besboro Is.	BBO	64. 12	161.30	244		Volcanic (Cretaceous)
Cape Darby	CDY	64. 34	162.79	335		Volcanic (Cretaceous)
Christmas Creek	CRK	64. 67	160.53	680		Sedimentary (Cretaceous)
Devil Mt.	DMA	66. 30	164.52	238	0.54	Volcanic (Quaternary)
Ear Mt.	EAM	65.92	166.24	701	0.54	Igneous (Upper Cretaceous)
Granite Mt. (NOAA, Closed mid 1978)	GMA	65.43	161.23	858		Volcanic (Tertiary)
Kogog River	KGR	63.16	162.05	320		Volcanic (Quaternary)
Kanguksam Mt.	KGS	63.30	168.99	488	0.54	Volcanic (Quaternary)
Kookooligit Mt.	KKL	63.59	170.37	655	0.54	Volcanic (Quaternary)
Kotzebue	KTA	66.84	162.59	24	0.54	Permafrosted Sedimentary (Quaternary)
Poovook Mt.	PVK	66.44	171.55	411	0.54	Volcanic (Cretaceous)
Savoonga	Sov	63.65	170.45	198	0.54	Volcanic (Quaternary)
Stuart Is.	STM	63.59	162.43	140		Volcanic (Quaternary)
Tin City	TCY	65.56	167.95	72	0.54	Igneous (Upper Cretaceous)
Teller	TLR	65.32	166.21	122	0.54	Metamorphic (Pre-Cambrian)
Topkok Pt.	TPK	64.55	163.99	122		Volcanic (Pre-Cambrian)
Unalakleet (Replaced by BBO in mid 1980)	UNL	63.89	160.67	122		Volcanic (Cretaceous)

TABLE 3

Layer Thickness (km)	P-Wave Velocity (km/see)
24.4	5.9
15.8	7.4
35.8	7.9
225.0	8.29
224.0	10.39
∞	12.58

TABLE 4

Starting Hypocenter Depth (km)	HYPOLLIPSE Depth (km) Output	$\langle \text{RMS} \rangle$ (sec)	$\langle \text{ERH} \rangle$ (km)	$\langle \text{ERZ} \rangle$ (km)
50	22.8	0.31	32.6	60.9
40	21.8	0.30	37.0	48.0
30	18.6	0.26	24.7	47.2
20	18.2	0.30	29.2	38.0
10	10.6	0.26	23.6	33.0
5	7.7	0.29	21.3	36.7

TABLE 5

DATE	ORIGIN	LAT	N	LONG	U	DEPTH	MAG	NO	GAP	DMIN	RMS	ERH	ERZ
770115	012	44.79	68N23.74	159W11.89		7.40	3.84	5	333	100.0	0.15	99.0	99.0
770117	14 1	3.15	66N47.65	1671433.43		25.22		5	259	268.1	1.40	26.0	41.7
770207	533	55.01	65N 3.39	162W27.91		15.91	2.41	6	164	160.2	0.10	5.6	8.3
770210	136	38.68	68N21.95	161W57.06		23.30		4	343	100.0	0.03	99.0	99.0
770211	8 6	57.86	64N28.61	168W20.05		.4.27*		4	306	100.0	0.93	99.0	99.0
770212	2050	8.91	67N47.55	163W57.47		3.97	2.92	4	356	100.0	0.40	99.0	99.0
770221	21 1	49.06	65N 1.04	164W 8.33		10.00*		4	149	215.3	0.84	99.0	99.0
770221	2146	8.21	65N 1.26	163W45.43		17.20		5	137	200.5	0.10	6.3	7.7
770224	1928	2.79	64N39.12	167W40.65		10.00	3.43	7	301	100.0	0.42	27.8	14.8
770228	2120	18.40	66N 1.20	155W54.25		13.98	3.25	8	189	253.2	0.44	4.9	4.7
770302	1110	13.46	63N30.31	165W11.19		9.34	3.75	6	270	286.6	1.30	21.1	25.1
770311	212	46.25	67N 5.77	160W15.63		11.25	2.96	4	298	100.0	0.04	99.0	99.0
770318	636	38.00	63N54.69	164W48.46		48.89		4	251	100.0	0.97	30.9	53.5
770319	1 2	17.67	64N58.44	162W21.68		10.00*	3.27	3	152	150.3	0.00	99.0	99.0
770320	524	1.78	64N59.30	162W19.20		10.24	2.17	4	152	1526	0.00	10.4	17.7
770320	1220	19.23	64N58.30	163W39.71		10.00U	2.69	6	131	193.6	0.95	6.3	13.1
770321	8 6	1.19	62N 0.96	165W10.39		10.00*	4.49	4	312	427.2	0.04	99.0	99.0
770323	1031	4.28	64N32.58	165W43.35		0.00		4	306	100.0	1.59	99.0	66.9
770323	1351	20.08	63N12.76	173W 2.15		0.26*		4	344	100.0	1.13	99.0	99.0
770402	427	52.24	65N40.94	154W34.88		11.51	-2.76	4	166	100.0	0.63	99.0	99.0
770403	1433	8,S0	66N17.14	161W49.23		1.33*	2.69	S	193	100.0	0.21	27.5	24.9
770406	1939	0.96	66N10.	Q5	163W 4.23	10.00		4	258	100.0	1.46	99.0	99.0
770407	1855	24.51	66N13.80	163W15.51		31.49		4240225.20	41		99.0	99.0	
770407	19 8	23.91	64N55.23	157W44.09		8.90.	2.55	6	177	100.0	0.56	4.2	8.2
770408	12 2	46.00	65N14.34	167W 3.35		0.36	2.35	5	180	100.0	0.13	99.0	99.0
770409	910	55.90	65N11.84	167W11.33		10.00	2.82	5	192	100.0	0.10	34.0	24.1
770409	18 9	38.39	63N59.78	164W37.95		9.88	2.12	4	239	100.0	0.10	92.S	99.0
770409	2240	39.03	67N 0.	14	163W 4.85		7.49	3.42	5	254	270.2	0.01	41.4.
770410	044	19.37	65N14.29	167W 4.41		0.06		5	181	100.0	0.77	99.0	99.0
770410	1640	47.89	64N58.58	162W22.	18	24.79	1.70	5	1S2	150.3	0.00	1.9	99.0
770411	950	10.29	64N48.80	164W 6.36		10.00*	4.01	7	127	197.1	0.42	3.3	5.7
770411	1826	12.91	64N50.89	164W 5.08		24.95	2.69	5	180	196.3	0.12	8.4	57.6
770412	028	4.97	64N55.93	167W45.87		.10.00%	3.45	5	245	100.0	0.54	99.0	77.8
770412	641	31.49	64N47.41	168W15.88		4.63		4	272	100.0	1.29	24.9	31.8
770413	535	15.73	65N 1.72	164W10.31		9.61	3.17	7	104	144.5	0.55	3.1	4.5
770413	648	10.23	65N18.71	163W24.05		6.77	2.16	5	147	124.9	0.73	6.2	13.3
770413	-650	38.79	65N25.67	163W54.76		23.77	2.33	4	127	124.4	0.25	2.1	8.2
770414	320	24.69	67N 3.89	164W56.83		10.00*	2.79	3	290	100.0	0.00	99.0	99.0
770414	347	4S.44	67N 6.44	165W 3.73		15.82	3.38	6	246	214.8	0.36	7.6	4S.3
770414	543	41.49	65N26.72	163W51.36		10.00U	2.26	4120	121.8	0.14	73.7	99.0	
770414	1858	52.28	64N48.04	162W30.27		4.39	3.10	4	125	139.70	0.00	4.6	9.2
770414	1955	4.77	65N54.44	162W41.61		0.31*	3.25	6	125	104.3	0.07	1.8	8.4
770415	13 0	42,93	65N23.69	164W 3.59		10.00*		5	127	131.4	1.06	9.9	19.0
770416	1854	33.05	66N10.87	161W41.58		5.42	2.75	5	194	133.1	0.27	17.2	18.2
770417	1920	4.76	65N15.15	167W37.83		10. 00*		5	214	160.S	0.S7	71.3	84.2
770419	10. 4	38.43	67N 0.89	163W13.05		0.04		4	277	198.1	1.27	6.5	6.1
770419	1245	23.74	65N26.60	166W22.35		5. 00*		5	134	108.7	0.39	1.0	49.9
770419	2126	12. 52	65N14.12	166W44.37		10. 00*	3.26	5	165	127.7	0.23	79.2	99.0
770420	1049	38.25	67N 1.66	163W11.31		0.11	2.89	4	280	198.8	0.21	6.9	8.8
770422	2319	15.22	65N31.55	167W 0.78		5. 89*		5	286	135.9	0.75	24.2	33.3
770423	3 9	23.32	65N17.91	163W52.07		0.17*	2.60	5	114	123.5	0.47	1.7	45.4
770423	847	7.97	64N33.22	160W 6.65		10. 00*	3.89	4	137	100.0	0.63	58.S	99.0
770423	1552	20. 46	65N11.07	164W14.72		2. 50*	2.45	7	91	143.1	0.60	2.8	4.6
770426	959	27. 46	64N20.64	164W57.14		25.01	3.95	5	220	213.7	0.73	29.5	71.0
770427	1752	7. 06	64N17.28	161W 6.30		5. 00*	2.90	5	149	100.0	0.31	29.5	46.7
770428	1045	49. 67	65N 6. 57	165W31.24		0.46*	2.88	6	211	203.4	0.49	11.1	10.1
770429	13 2	43. 81	65N 4.33	164W10. 79		0.57*	2.23	4	153	143.4	0.37	2.3	11.2

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO GAP	DMIN	RMS	ERH	ERZ
770429	1310	5.33	65N 4. 16	164M10.82	0. 64	2.24	4 153	143.5	0.35	11.4 20.2
770429	1353	29.60	65N 5.86	165 W25. 72	0.63*	2.63	6 118	127.0	0.3S	2.1 5.2
770429	2220.45.	11	65N 4.50	162W28. 87	0. 12*	2.58	9 193	148.6	0.73	2.0 3.1
770430	19 0	S.68	65N21. 35	166W31. 74	10. 00*		6 142	.111.6	0.55	0.9 16.8
770501	558	43. 31	66N54. 04	164W 6. 19	.10.00*	1.72	3 224	100.0	0.00	99.0 99.0
770501	739	30.65	67N 1.70	164W13. 89	10.00*	200	3 238	1.00.0	0.00	99.0 99.0
770501	23 7	29.62	64N59. 91	166W13. 55	10. 00*		4 255	130.8	2.12	68.8 83.8
770505	1110	26.4S	64N39. 79	164W 5.23	10.00*	2.45	4 204	159.2	0.16	12.6 17.7
770507	15 6	7.53	65N18.10	163W51. 41	0. 31*	3.43	5 107	122.9	0.34	1.7 7.1
770508	19 5	11.67	65N 9.47	168W16. 03	0. 53*		4 26S	192.0	0.77	19.9 22.8
770510	1923	33.30	65N11. 42	168W26. 75	" 3.77		4 276	197.6	0.41	34.2 22.4
770511	1932	29.25	66N42. 97	163W29. 48	10.36	3.52	5 264	237.9	0.01	22.3 11.5
770511	22 0	16. 10	64N22. 51	158W12. 52	10.00*		3 302	100.0	0.00	99.0 99.0
770512	532	34.66	64N12. 99	171W25. 16	- 10.00*		5 327	100.0	0.24	99.0 99.0
770513	15 2	17. 38	63N16. 80	156W59. 93	26.41		5 332	100.0	0.07	38.2 46.6
770514	1033	29.96	66N16. 69	162W29. 90	13.19	3.42	5 152	111.0	0.03	7.4 12.3
770516	1735	40.63	65N 6.37	164W55. 97	5.46		4 171	100.0	0.6799.0	99.0
770519	1242	54.93	65N 9.67	164W29. 06	10.44	2.49	7 145	154.6	0.54	9.5 13.0
770520	728	21.93	65N23. 00	16SW40.10	0. 00*		4 227	100.0	0.27	10.1 11.2
770523	643	8.40	64N34. 97	161W28. 44	10.00		4 313	100.0	0.06	99."0 99.0
770523	14 3	22.95	65N44. 51	163W26. 02	11. 41	2.61	4 187	12S.4	0.68	21.1 19.9
770525	2046	36.42	67N16. B2	163W31. 02	0.82		4 32(J	100.0	4.89	99.0 46.4
770601	841	6.37	64N35. 55	160W15. 46	0.81	3.36	5 215	100.0	0.24	13.3 39.0
770604	2222	24.72	66N 5.78	166W29. 77	10.00*	3.00	4 195	193.0	0.27	49.4 40.1
770612	7 5	45.69	65N22. 41	164W 0.66	21. 03	2.66	5 130	129.3	0.23	2.2 4.6
770613	1626	19. 99	65N23. 28	163W14. 35	65. 71	3.15	4 191	100.0	1.85	35.9 34.2
770613	1656	42.03	68N31. 70	168W22. 78	1.9S		4 332	100.0	0.02	99."0 99.0
770616	16 4	23.76	64N59. 66	162W30. 14	12. 24	2.36	6 111	144.6	0.12	2.6 4.7
770625	1552	4.92	64N56. 07	162W25. 10	1. 01*	3.52	6 114	148.1	1.20	3.7 8.0
770625	1948	53. 58	65N15. 45	165W54. 62	10.00*		3 129	99.3	0.00	12.3 99.0
770628	1255	44.23	69N 5.20	171W57. 13	10. 00*		4 340	580.5	0.45	99.0 96.8
770628	1315	41.60	66N 4.51	166W47. 83	0.00		4 235	265.0	6. 18	99.0 17.1
770630	1222	42.27	65N21. 28	163W50. 11	12.26	3.26	4 145	190.8	0.00	22.3 23.5
770630	1656	4S.40	65N45. 11	163W51. 75	26.54	2.70	4 163	100.0	0.23	99.0 99.0
770707	1929	48. 31	65N37. 40	167W29. 60	12.93	3.33	4 183	100.0	0.36	99.0 99.0
770714	1822	15.36	66N27. 39	157W38. 48	24. 41	2.84	4 225	100.0	0.15	20.S 99.0
770715	1436	36.46	67N37. 67	156W36. 72	10.00	3.06	4 254	100.0	0.58	99.0 99.0
770715	1648	3.54	66N27. 55	162W32. 35	5. 38		5 155	129.4	0.46	8.7 14.5
770720	1717	17.21	66N 0.27	157W21. 34	40.76		6 174	264.2	0.74	12.7 99.0
770723	1751	50.09	65N 3.60	162W21. 36	26.37	2.99	6 105	153.5	0.64	4.3 99.0
770726	2323	21.44	64N46. 74	163W12. 14	18. 16	2.84	5 20S	163.3	0.30	2.6 6.3
770806	2229	0.30	65N36. 74	167W52. 35	0. 72*		3 250	100.0	2.24	99.0 99.0
770009	856	49.71	64N 0.53	160W12. 94	10. 00*		5 161	100.0	0.32	41.2 53.4
770S10	729	8.33	64N24. 83	163W35. 90	25.47	2.59	6 238	177.4	1.34	3.7 99.0
770814	1212	9.80	64N34. 77	159W26. 79	0.39	3.44	6 140	303.4	0.30	6.3 5.1
770S14	1424	56.07	63N S.14	168W29. 33	0. 0S*		6 291	100.0	0.86	75.6 78.6
770814	1429	48.57	67N19. 13	163W11. 89	0. 59*	3.10	5 306	22S.4	0.68	4.6 3.4
770'209	9 2	13. 12	66N45. 96	162W 5.25	10. 00*		4 167	100.0	0.50	99.0 86.0
770909	1021	32.	58	65N37. 79	163W29. 06	10. 00*		4 186	239.S	1.21 11.2
770910	1511	36.66	64N31. 95	160W41. 11	10. 00	3.06	4 188	100.0	0.05	99.0 99.0
770910	1516	2.71	65N15. 86	157W11. 71	10. 00*		3 310	100.0	0.00	99.0 99.0
770910	2318	17.18	66N 0.S1	156W21. 84	10.00*	3.25	4 190	232.7	0.03	99.0 99.0
770914	1546	20.97	64N44. 57	165W31. 90	12.95	3.31	6 151	179.4	0.17	10.4 12.S
770915	824	33.73	65N33. 74	164W 3.41	5.11		4 246	100.0	0.80	99.0 99.0
770920	352	3.87	64N21. 99	162W43. 09	17.39	2.74	5 166	137.8	0.04	3.2 4.7
770927	640	9.67	64N55. 36	164W29. 76	22.62		6 133	163.0	0.27	2.2 7.4
771008	2250	2.06	64N42. 96	155W59. 45	10.00	2.30	6 179	237.4	0.50	13.6 99.0

DATE	ORIGIN	LAT	N	LONG	W	DEPTH	MAG	NO	GAP	DMIN	RMS	ERH	ERZ			
771011		336	52.	11	64N40.66	158W16.40	10.16	1.42	4	290	100.0	1.59	99.0	99.0		
771014		525	0.13	66N16.74	156W17.16	24.40	2.78	7	211	244.9	0.58	11.8	6.7			
771021		1423	39.55	65N24.66	167W37.25	10.00*	2.67	5	190	172.5	0.09	63.8	77.6			
771027		853	13.73	64N41.02	166W4.45	15.81	2.97	6	208	193.7	1.35	4.3	3.1			
771028		1743	52.	15	68N16.53	159W9.13	.11.65	2.96	5	296	100.0	0.21	99.0			
771029		737	33.60	65N19.80	167W54.82	6.55	2.64	5	235	188.8	0.	18	23.7	21.0		
771102		1918	21.52	65N44.58	162W15.18	0.61	1.81	7	145	123.4	0.20	2.2	7.9			
771103	652	26.45	63N	7,	02	167W43.60	10.00*	3.25	4	309	100.0	0.	18	99.0	99.0	
771105		1748	57.77	66N57.06	161W53.11	10.00	3.30	4	291	100.0	1.49	99.0	99.0			
771107		513	54.63	65N55.65	159W27.03	0.81	2.68	10	137	232.5	1.04	1.8	2.5			
771107		934	28.25	68N14.36	155W39.00	10.00*	3.	14	7	266	371.0	0.80	30.2	25.2		
771110		922	52.83	67N	2.40	156W22.35	9.97	2.14	4	358	100.0	0.99	99.0	99.0		
771111	8	8	4S.02	65N	3.73	160W	1.21	0.00*	1.85	4	244	248.5	5.S2	8.S	6.1	
771112		746	17.67	64N40.91	152W34.47	10.00	2.12	4	316	100.0	0.18	99.0	99.0			
771113	2226	39.40	66N48.56	157W41.73		7.59	2.44	4	208	200.0	0.00	3S.4	99.0			
771120		1910	25.25	65N25.16	165W38.47	10.00*	3.65	4	120	210.	1	0.65	38.7	75.7		
771126	1651	6.10	65N26.08	154W54.20		9.55	3.30	5	202	318.3	0.06	42.1	58.4			
771128		227	4.99	63N	9.00	162W39.94	10.00*	2.18	6	270.	100.0	0.21	99.0	99.0		
771128		924	3.08	66N17.50	163W5.33	10.	00*-	1.86	4	227	128.2	3.50	10.9	22.5		
771201		649	51.43	65N24.65	162W24.78	10.98	1.55	8	131	168.S	0.51	2.3	4.0			
771202		344	6.32	64N11.23	159W23.41	20.29	1.05	4	190	100.0	0.06	99.0	99.0			
771202		2327	36.61	62N49.58	163W16.14	4.32*	3.47	4	341	100.0	0.30	99.0	99.0			
771205		11	3	1.57	65N	5.95	162W30.50	0.79*	1.62	7	104	162.3	0.53	2.8	5.5	
771205		1143	8.06	65N	4.94	162W32.71	2.50	1.22	8	105	163.1	0.24	1.6	3.4		
771206		1155	43.03	62N43.15	163W35.97	10.00*	2.54	7	289	323.4	0.55	86.9	S4.7			
771209		051	38.21	64N49.00	165W23.12	9.86	2.41	8	127	169.8	0.27	4.5,	6.6			
771210		18	1	11.04	62N44.05	162W46.43	"	0.50*	3.37	9	278	30?	7	1.23	36.0	43.2
771211		840	27.51	64N18.18	166W35.52	0.02	2.67	7	273	242.3	0.74	12.7	11.8			
771212		955	2.51	66N54.39	164W45.55	43.96	4.02	5	269	229.0	0.02	20.0	18.3			
771213		556	48.57	62N35.49	162W27.03	10.00	2.88	4	337	321.9	2.69	99.0	99.0			
771215		1944	40.50	66N10.28	156W26.23	19.36	1.98	6	202	100.0	0.34	53.9	14.0			
771216		447	20.74	66N35.66	168W5.75	5.28	2.59	7	284	258.8	0.99	11.6	6.5			
771216		22	0	27.25	67N	1.98	161W51.93	0.06	2.29	4	355	100.0	1.92	99.0	99.0	
771220		732	24.88	65N23.64	163W45.30	15.70	1.91	4	227	10C).0	1.08	41.5	72.9			
771221		1349	44.76	64N50.60	164W39.18	52.77	2.10	7	162	172.6	0.06	8.4	19.0			
771222		12	8	10.64	65N	0.03	162W23.48	10.00*	0.98	3156	153.1	0.00	99.0	99.0		
771224		1853	20.82	66N53.10	163W56.73	1.25*	1.96	6	222	203.4	1.44	3.6	3.0			
771225		12	9	3.02	65N19.49	162W32.83	1.17	1.23	6	118	150.1	0.95	11.4	16.8		
771226	622	24.66	64N34.40	163W42.92		25.23	1.73	7	155	172.9	0.52	2.4	99.0			
771226		639	15.08	64N35.48	160W38.26	0.18*	1.76	5	192	100.0	1.00	32.5	35.7			
771227		1550	35.97	64N34.29	164W1.94	23.33	1.40	5	158	186.7	0.25	3.2	9.0			
771231		837	50.08	65N11.13	163W58.67	8.90	2.17	6	125	130.9	2.20	6.0	11.6			
771231	2051	47.17	64N33.92	162W49.80		0.85*	1.99	9	148	135.2	0.84	1.1	4.5			
780101		518	29.51	66N28.74	163W29.61	10.00	1.80	4	158	155.9	0.97	99.0	99.0			
780101	533	33.07	65N19.48	162W42.52		3.98	1.97	4	322	100.0	0.00	99.0	99.0			
780101		540	53.50	67N14.11	166W14.49	10.00	1.92	5	292	100.0	0.17	99.0	99.0			
780102		1	8	20.75	67N26.55	170W3.68	10.00*	2.97	5	343	384.8	1.50	99.0	99.0		
780102		1958	40.50	65N45.27	164W23.19	25.	17	1.88	7	193	150.0	0.27	2.0	99.0		
700106		1935	45.36	65N	0.	14	163W19.85	24.72		4	181	154.4	0.01	3.2	99.0	
780106		2040	26.32	65N20.37	166W29.72	10.	14	1.97	4	251	100.0	0.10	99.0	99.0		
780106		22	7	38.50	64N16.51	163W39.23	25.78	2.02	4	188	172.4	0.46	5.9	99.0		
780108	13	0	48.88	64N34.96	160W20.61	0.76*	2.25	4	210	100.0	0.08	15.5	43.5			
780109		1748	2.07	66N31.06	157W21.91	10.00U	2.43	6	184	233.5	1.15	4.7	10.7			
780111		154	58.73	67N16.93	164W19.99	10.00*	2.13	3	298	100.0	0.00	99.0	99.0			
700112		510	41.64	65N	7.08	164W13.88	25.	17	1.70	4	213	100.0	0.29	17.0	44.6	
780112		1139	24.66	65N	3.41	164W11.04	22.07			4	206	100.0	0.43	18.1	8.8	
780112		1150	49.90	65N	0.78	164W	6.99	24.48	1.85	5	148	100.0	0.51	8.8	20.2	

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780114	445 18.90	65N12.44	161W50.65	6.89	2.11	4	107	172.7	0.00	7.1	12.2
780115	718 37.72	63N S.53	166W43.29	14.29	2.30	4	332	100.0	0.3S	99.0	99.0
780117	2344 38.64	66N58.14	163W55.16	10.00*	1.52	3	263	100.0	0.00	99.0	99.0
780118	620 12.42	61N23.82	168W12.97	10.00*	3.15	3	316	100.0	0.14	99.0	99.0
760119	2027 36.32	64N12.70	161W52.73	10.00*	0.68	4	167	173.0	0.35	12.4	20.5
780121	2249 35.03	66N16.33	157W26.72	14.05	3.73	6	168	236.9	0.30	4.8	50.1
780122	1646 30.50	66N33.80	162W12.32	10.80	2.42	4	189	134.0	0.01	99.0	99.0
780123	726 36.42	64N31.92	164W55.88	11.72	3.10	4	174	201.2	0.00	24.8	27.3
780123	1358 57.79	63N51.53	164W26.62	15.07	2.	11	4	243	100.0	0.05	74.7
780125	527 31.69	64N45.04	165W36.40	10.00	1.19	5	224	219.1	0.33	40.6	44.S
780128	1941 29.09	63N26.00	165W50.50	37.60	2.85	6	203	268.6	0.12	5.5	99.0
780130	032 41.07	65N34.42	166W49.26	10.00	2.07	4	320	100.0	0.50	96.3	98.2
780130	421 10.14	64N32.93	165W27.0S	0.29*	1.85	4	267	100.C)	0.37	72.625	6
780131	0 1 37.27	65N34.82	162W48.02	0.88	1.32	4	126	141.0	0.00	4.6	10.5
780131	337 51.32	65N17.97	164W 0.88	0.64*	2.20	4	136	130.3	0.26	2.0	7.0
780131	1423 20.20	65N21.13	I64W26.10	20.20	1.61	5	1S1	149.1	0.53	3.1	14.2
780131	164S 48.41	65N21.89	164W57.96	10.00*	1.93	3	179	100.0	0.00	99.0	99.0
780131	17 0 21.70	66N13.28	162W53.37	10.00*	1.30	3	139	116.4	0.00	99.0	99.0
760201	230 52.02	64N57.89	162W32.48	8.82	2.47	5	113	154.4	0.10	3.8	7.3
780201	2239 50.01	64N22.04	162W41.51	10.00*	1.25	3	16S	137.0	0.00	3.2	99.0
780202	S22 19.46	65N 6.27	157W52.24	10.00*	1.93	3	165	100.0	0.00	6.6	99.0
780204	232 13.96	64N30.30	163W45.47	22.58	2.05	4	164	171.8	0.07	4.5	99.0
780204	1832 24.57	67N 4.71	16X449.77	10.00*	1.40	3	297	100.0	0.55	99.0	99.0
780207	2147 30.50	66N39.88	161W 9.93	10.00*	1.85	3	253	155.1	0.00	,99.0	99.0
700208	1439 23.43	64N39.27	162W52.95	10.00*	1.66	3	141	142.8	0.00	3.0	99.0
780209	1810 13.29	63N21.47	163W 0.44	10.00*	2.39	3	257	100.0	0.00	99.0	99.0
780209	22 5 13.02	65N 9.71	162W17.26	10.00*	1.08	4	99	162.9	0."31' S.0	8.9	
780210	1428 36.73	64N21.69	162W42.55"	10.00*	2.70	4	166	138.0	0.22	3.2	99.0
780215	1718 44.60	63N34.42	165W35.29	10.00*	1.78	3	289	100.0	0.00	99.0	99.0
780215	1740 3.26	66N35.27	164W13.76	10.00*	1.37	3	226	100.0	0.01	99.0	99.0
780216	751 0.11	65N17.69	167W30.94	4.80	2.32	4	282	100.0	0.23	99.0	99.0
780219	1341 22.12	65N13.04	167W48.76	0.84	2.21	4	289	100.0	0.19	99.0	99.0
780224	1750 37.60	65N36.52	163W17.79	14.09	1.62	4	224	141.1	0.23	9.2	5.3
780225	1511 7.53	65N33.57	165W10.16	10.00*	1.44	4	194	184.3	0.08	99.0	36.0
780226	2159 41.07	65N54.65	166W39.92	0.63*	2.54	5	261	209.8	0.S3	18.9	6.9
780228	851 33.10	65N56.81	156W13.07	40.79	3.60	4	184	100.0	0.03	80.S	99.0
780228	1623 43.96	65N22.96	167W42.27	10.00	2.28	4	285	100.0	0.00	99.0	99.0
780228	1628 "37.52	64N48.82	165W41.59	10.00*	2.30	5	227	220.4 C).10	62.3	70.2	
780303	8 7 7.13	63N55.20	169W23.18	0.16	4.20	5	159	349.S	0.07	56.3	99.0
780303	1156 56.57	62N17.31	166W18.74	11.24	2.44	4	337	100.0	0.18	99.0	99.0
7S0304	557 5.21	65N 7.27	165W15.59"	24.05	1.19	6	189	191.1	0.16	5.9	99.0
780305	1449 52.61	65N37.53	166W50.39	10.00*	1.66	5	265	100.0	0.S5	99.0	99.0
780306	1411 3.69	65N 8.69	170W14.90	0.89*	2.43	5	237	292.4	1.27	11.7	17.7
780307	511 42.74	66N23.64	163W38.44	10.00*	1.00	5	148	153.7	0.22	99.0	99.0
780308	1327 52.93	67N16.41	163W32.25	11.13	1.58	4	297	100.0	0.00	54.7	16.3
780308	1424 35.92	66N38.80	163W32.15	10.00*	1.36	4	332	171.3	0.09	99.0	99.0
780310	720 30.26	65N39.54	166W23.18	10.00*	2.72	6	186	215.7	0.46	8.1	5.4
780310	1527 20.68	65N43.25	167W 4.95	9.39	1.69	4	199	237.3	0.73	42.3	99.0
780310	1531 9.06	65N41.03	166W28.51	10.00	1.66	4	255	100.0	0.45	99.0	29.3
780310	1532 22.68	65N39.79	166W19.53	10.00*	1.69	3	249	100.C)	0.50	99.0	99.0
780310	2159 36.03	65N41.12	163W 9.47	10.00*	1.	10	3	210	162.5	0.00	99.0
/80311	1437 17.95	67N 7.49	160W37.94	4.23*	1.74	3	298	194.9	0.44	99.0	99.0
780315	751 36.9S	63N43.42	163W17.33	12.54	2.90	6	233	214.1	0.61	5.5	9.0
780317	21 3 55.09	65N10.14"	166W52.15	10.00*	1.53	3	267	100.0	0.02	99.0	99.0
780318	1335 57.02	64N47.71	165W24.84	10.00	1.66	7	198	208.7	0.27	30.7	40.8
780319	540 23.76	65N46.58	166W 8.18	0.03	1.90	7	246	198.6	0.35	4.6	4.3
780319	1925 18.13	65N 3.86	163W50.83	0.13*	1.88	9	114	140.9	0.64	1.2	3.7

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780319	2122 2S.26	65N 3.71	163W51.15	0.60	1.69	6	115	141.1	0.62	2.4	5.8
780320	410 34.40	65N27.70	152W26.21	1.55	" 1.13	" 4	18S	100.0	11.47	99.0	99.0
780320	14 3 37.36	64N59.61	163W55.74	23.12	1.87	6	114	147.9	0.71	3.2	8.2
780320	1743 45.35	65N25.74	167W56.93	10.00*	1.89	5	287	100.0	0.47	97.0	99.0
780320	2139 2.14	66N16.69	162W13.74	0.16	1.09	8	168	105.1	0.41	1.1	10.3
780323	124 37.88	65N22.52	169W22.10	11.67	2.37	4	222	244.0	0.12	99.0	99.0
780327	254 4.66	65N27.35	166W37.03	0.25*	3.15	7	180	238.6	0.80	4.0	3.2
780327	2246 10.27	64N46.42	164W40.25	33.03*	1.37	6	127	100.0	0.28	47.7	84.2
780329	2352 S0.88	64N39.24	63° W35.49	25.15	1.54	5	146	188.2	0.59	2.6	99.0
780330	127 4.03	65N12.41	57W53.35	7.95	2.16	7	136	100.0	0.36	31.S	11.3
780330	10 9 38.79	65N 0.34	164W26.06	24.64	2.16	7	136	100.0	0.60	9.5	23.4
7-0331	650 13.24	64N38.85	162W37.26	5.00*	3.08	4	139	203.9	0.09	6.9	99.0
700331	657 52.60	65N 7.63	164W54.38	8.56	1.52	6	172	1.00.0	0.20	15.1	9.9
780401	2136 44.04	65N 4.50	163W49.57	0.09	4.11	7	10S	204.9	1.30	2.3	3.3
780401	2142 0.63	65N13.76	161W11.07	1.25*	2.07	4	106	211.6	0.99	7.4	16.7
780401	21S1 15.72	65N 8.06	164W56.70	7.93	1.43	5	170	100.0	0.33	30.9	12.5
780401	2224 6.79	65N 1.91	164W13.41	10.00	2.35	5	128	100.0	0.60	26.7	48.5
780402	2020 42.11	64N46.91	165W32.28	10.00	1.77	5	213	100.0	0.18	68.0	63.8
780406	1927 30.20	64N41.20	166W13.42	10.00*	2.27	5	275	100.0	0.19	64.9	35.0
780407	1756 48.99	65N17.14	162W34.03	19.70	1.96	7	147	173.5	1.26	3.0	6.0
780408	2012 37.02	64N46.73	162W35.44	4.25	1.48	7	134	191.3	0.46	4.0	5.6
780408	2319 53.95	64N46.58	162W31.36	8.37	1.45	7	135	193.1	0.17	4.1	5.7
780410	338 50.29	64N33.86	164W 6.45	0.89	2.07	7	159	194.1	0.74	9.4	14.1
780413	1956 15.31	66N19.47	166W15.16	7.22	2.31	5	261	200.4	0.10	8.9	2.8
780414	1243 40.66	64N59.74	164W51.25	16.03	1.37	4	178	100.0	1.19	52.7	32.9
780414	19 4 23.56	64N47.35	165W27.14	12.40	2.06	.4	203	100.0	0.44	99.0	99.0
780418	314 45.02	65N 7.73	164W50.14	17.22	1.63	4	185	100.0	0.05	99.0	99.0
780418	1137 28.57	67N39.15	160W38.77	0.31	2.35	.5	247	352.8	1.16	15.0	3.0
780419	1648 43.01	64N29.94	167W22.27	8.42	2.47	4	156	240.2	0.00	99.0	99.0
780420	1835 6.71	67N 2.11	165W32.49	1.25*	2.30	6	280	275.5	0.75	4.9	3.7
780422	953 59.67	64N49.48	162W25.95	14.25	1.82	7	139	190.4	0.26	2.4	7.7
780426	232 18.62	64N46.19	165W20.57	10.44	1.57	4	189	100.0	0.	14	99.0
80426	441 54.93	64N56.18	164W12.86	17.56	1.66	6	121	100.0	0.	18	5.7
80430	211 32.8S	61N22.53	169W20.56	15.13	3.23	4	293	100.0	0.00	99.0	99.0
80504	710 20.42	64N22.93	163W24.58	13.82	1.39	7	173	219.7	0.24	7.7	8.0
80505	2256 38.56	65N13.82	165W11.66	24.50	1.41	5	188	100.0	0.20	45.7	43.2
80507	2149 0.9S	65N42.25	165W22.98	0.29*	1.79	4	210	178.5	0.07	18.3	7.5
80S11	737 4S.08	64N15.83	162W57.79	47.17	1.31	5	179	100.0	0.74	36.4	29.8
80513	231 51.45	65N 6.13	162W18.61	35.39	2.31	6	150	167.5	1.20	4.1	17.6
F0514	2345 6.69	62N47.44	169W24.33	23.97	3."50	5	262	100.0	0.	51	99.0
80518	83S 20.38	65N29.68	164W15.28	22.98	1.71	6	182	167.9	0.16	3.9	3.9
80S18	1336 25.94	65N44.10	165W39.96	0.60*	1.89	5	225	185.2	0.24	11.4	5.0
80520	1254 27.48	64N32.25	162W49.73	15.68	1.85	4	151	211.3	0.00	6.6	99.0
80520	1345 35.53	64N31.24	162W50.45	24.39	2.68	4	153	212.9	0.00	99.0	99.0
80523	1428 37.74	65N18.95	164W19.59	26.29	1.64	5	187	187.4	0.33	8.3	99.0
EJ528	1741 36.36	65N15.25	166W45.47	10.00*	2.71	5	261	258.9	0.34	99.0	51.4
80529	1441 55.51	66N34.09	163W20.66	10.00*	2.63	4	167	242.1	0.11	99.0	71.5
80530	2342 17.48	64N58.80	162W10.25	10.00	2.48	4	151	182.4	0.62	4.S	99.0
80531	1151 21.94	65N 7.79	162W42.49	1.65	2.23	6	140	173.6	0.34	3.4	"0.9
80601	1759 58.81	65N 2.70	164W14.57	10.00*	1.61	3	129	100.0	0.00	99.0	99.0
80602	725 38.68	65N21.71	162W35.13	23.93	1.63	5	187	191.50	0.024.5	7.8	
80605	1017 18.89	63N28.77	162W 0.86	10.61	2.66	4	250	100.0	0.02	99.0	99.0
80610	953 4.52	65N21.54	162W47.82	11.60	1.82	4	181	196.6	0.00	5.2	9.1
80610	1753 10.62	65N25.94	164W28.16	7.09	2.50	5	154	178.6	0.08	22.8	17.9
80612	1522 55.99	64N46.99	165W34.49	10.00	2.50	4	217	100.0	0.14	68.5	73.1
80612	1612 11.24	65N33.01	164W40.92	11.31	2.13	4	168	100.0	0.00	40.0	19.4
E0612	2021 8.67	64N51.66	161W33.16	7.93		4	194	210.7	0.00	26.3	44.3

DATE	ORIGIN	LAT "N	LONG W	DEPTH	MAG	NO	GAP	DMIN	RMS	ERH	ERZ
780613	2020 S4.04	64N53.25	162W37.69	14.67	2.02	4	165	17?.	8	0.00	4.5
780614	819 49.93	65N 2.28	164W 9.13	11.83	2.70	.4	131	100.0	0.00	S.7	12.4
780619	513 19.35	64N20.76	167W15.99	0:	29*	3.15	4315	352.0	1.19	99.0	47.9
780630	341 37.27	65N23.86	163W 1.68	10.00	2.08	4	224	162.2	0.00	7.7	9.7
780630	1413 37.81	65N25.95	163W 0.09	10.00*	2.04	3224	158.2	0.00	7.3	99".	0
780703	19 1 12.55	64N32.91	161W32.73	35.40	2.64	4	181	100.0	1.02	S3.9	99.0
70070S	1128 6.41	65N45.59	160W15.71	10.00	2.05	4	329	100.0	0.21	99.0	99.0
780710	1026 17.50	64N52.95	162W48.23	24.93	2.41	5	200	100.0	0.49	29.0	42.\$
700714	23 6 42.09	66N26.90	164W49.12	4.	23*	3	359	100.0	7.97	99.'0	99.0
780716	1050 8.96	66N23.68	1 3412.59	10.00*	2.10	3	129	100.0	0.00	99.0	99.0
780718	521 38.94	65N20.15	164W14.70	9.95	2.36	4	223	100.0	0.80	99.0	99.0
780722	1835 49.71	66N22.87	161W45.36	10.00*	1.47	4	203	100.0	0.13	99.0	99.0
780802	1S 8 15.72	65N14.49	163W 2.69	1.25*	2.15	4	230	179.6	0.71	14.8	9.4
780803	920 36.97	63N45.88	169W41.64	10.00*	2.86	3	194	100.0	0.-00	99.0	99.0
780815	1839 19.10	65N25.87	162W58.66	10.00*	1.73	3	224	1S8.2	0.00	7.4	99.0
780817	1729 15.26	66N51.48	163W42.35	10.00*	1.27	3	241	100.0	0.00	99.0	99.0
78081S	1741 57.33	65N24.27	162W34.67	10.00*	2.37	3	190	195.3	0.00	5.7	99.0
780827	2316 52.99	65N31.02	165W 1.84	10.00*	1.96	3	186	184.2	0.00	99.0	99.0
781007	1520 28.36	64N47.49	163W17.55	44.88	3.12	9	131	167.6	2.06	4.3	89.4
781010	1429 31.13	65N17.74	166W 2.36	12.22	2.31	5	233	100.0	0.16	99.0	99.0
781019	1712 7.30	66N21.52	162W17.01	10.00*	1.38	3	148	100.6	0.00	99.0	99.0
781021	22 6 13.37	65N36.12	170W 8.79	1.	27	2.74	8	316	.267.2	0.86	5.4
781023	320 53.51	66N27.59	162W24.04	0.15*	3.45	8	112	96.6	1.45	1.8	2.7
781025	1239 17.86	63N57.35	164W 1.35	10.00	1.81	5	226	100.0	0.95	99.0	99.0
781025	15 7 39.37	65N41.84	162W52.83	2.59*	2.01	4	263	128.3	0.02-	2.3	99.0
781026	419 S.03	64N57.00	162W20.89	2.50*	1.33	6	131	150.2	0.39	2.8	3.8
781027	546 30.25	66N25.86	162W22.42	14.09	1.29	4	149	97.3	0.48	1.5	17.3
781028	844 49.22	64N54.07	162W27.01	10.00*	2.56	8	127	144.1	0.93	2.4	6.6
781108	245 24.06	65N36.09	167W 5.45	10.00*	1.55	4	360	141.0	2.59	7.9	13.9
781121	8 2 10.32	65N45.78	168W 2.46	1.	58*	2.97	4	255	183.0	1.40	39.2
781122	5 0 47.10	65N48.18	166W 3.54	10.00*	1.93	7	158	141.7	0.85	3.5	3.8
781122	1749 44.77	65N19.31	162W 4.18	12.26	2.44	7	"145	171.1	0.18	3.2	5.3
781123	1043 24.50	65N 9.57	164W35.55	10.00*	1.38	6	159	161.2	0.66	5.9	8.7
781124	028 5S.50	63N42.41	156W54.69	10.00	2.90	5	313	422.6	0.88	99.0	99.0
781124	850 58.91	62N42.06	152W29.26	2.86	3.00	5	333	664.9	0.05	99.0	99.0
781127	1153 37.90	65N 0.59	163W46.49	25.46	3.40	7	109	157.2	0.43	3.S	16.0
781202	1718 44.05	66N56.69	161W48.39	10.00	0.98	5	296	100.0	0.31	99.0	99.0
781203	048 32.29	65N 6.27	157W31.84	4.32*	2.11	4	219	100.0	0.51	78.6	58.5
781204	552 8.92	64N56.21	162W23.32	10.00	1.94	5	130	147.9	0.62	2.7	99.0
781204	1057 21.27	64N58.94	163W59.37	14.30	3.27	8	196	165.9	0.76	4.8	7.8
781205	1448 40.03	65N51.17	166W10.35	5.00*	1.76	5	167	148.4	0.23	12.3	15.9
781206	833 55.14	64N47.95	165W26.16	9.95	1.80	6	159	172.2	0.30	7.4	12.3
781206	12 9 26.31	66N 7.09	163W56.88	10.00*	1.26	5	219	103.6	0.70	1.6	14.4
781210	2321 35.70	65N14.51	167W 6.82	10.00*	2.04	5	182	167.1	0.33	26.5	26.7
781211	5 7 34.94	64N57.39	166W31.54	0.49	1.69	8	189	175.6	0.42	22.3	2S.9
781211	1136 26.82	65N49.24	167W27.96	9.50	1.99	5	204	170.9	0.21	64.8	72.6
781212	14 8 8.68	64N19.96	163W29.28	10.00*	3.36	4	299	216.3	1.80	22,0	32. 1
781212	1512 9.87	65N51.03	159W45.41	0.16*	1.12	4	314	100.0	1.5s	80.0	12.0
781212	2239 6.33	67N15.17	160W33.83	0.63	1.86	4	31S	204.3	0.53	7.9	3.6
781214	1926 13.39	68N 7.99	161W21.11	16.14	1.60	6	315	246.4	0.10	15.9	19.6
781218	210 18.70	65N 6.54	156W59.93	10.00	2.62	4	315	100.0	1.32	99.0	99.0
'81220	19 4 41.06	64N33.31	167W38.78	4.60	2.24	4	265	100.0	0.11	99.0	59.8
781220	21 3 50.10	66N15.62	164W27.72	10.00*	0.39	4	230	127.5	1.11	20.9	16.3
781224	, 7 1 57.97	67N 2.62	157W21.26	10.00	2.51	5	239	316.1	0.48	99.0	99.0
781224	1313 6.17	63N45.86	157W45.23	10.00*	4.50	12	139	321.1	0.S4	4.7	44.8
781225	156 11.88	65N47.03	154W55.29	4.52	1.82	4	166	100.0	1.13	99.0	99.0
781228	1836 13.60	63N11.95	148W 3.00	10.00		4	325	100.0	2.53	99.0	99.0

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	GAP	DMIN	RMS	ERH	ERZ
790101	10 2 10.03	63N54.20	164W29.26	0.58*	4	303	280.3	0.22	99.0	26.2	
790101	.1624	16.51	65N36.37	167W14.61	26.74	2.15	4	156	145.8	0.15	7.7
790103	150 43.04	65N17.09	166W36.50	10.00*	1.68	4	154	147.8	0.41	80.3	99.0
790103	331 31.30	64N35.98	159W35.21	10.00	1.63	4	301	100.0	0.10	99.	0,99.0
790106	1542 47.56"	63N33.58	157W49.91	.29.42		10	130	296.2	0.42	4.6	7.2
'90106	1545 33.24	63N31.63	157W54.44	10.00*		6	142	294.4	0.08	6.S	46.0
790107	1031 4.20	64N22.90	162W38.90	10.00	1.39	4	161	198.6	0.34	99.0	99.0
790108	1149 15.21	65N27.00	163W55.32	0.27*	3.15	4	222	166.4	0.41	5.,7	5.9
790110	2 9 40.16	64N56.43	165W51.66	14.97	1.52	5	"156	163.3	0.11	11.2	18.5
790110	438 14.60	64N53.09	165W49.02	25.08	1.96	5	159	168.4	0.16	4.7	59.9
790110	440 31.10	64N51.25	165W47.45	24.41	2.50	6	161	171.2	0.71	4.1	30.5
/90111	S26 30.86	64N11.64	167W 1.28	10.00*	1.53	3	283	100.0	0.24	99.0	99.0
790111	915 21.44	64N44.64	165W37.54	16.40	2.02	7	163	180.S	0.68'13.0	.15.0	
790115	22S5 56.09	65N31.72	167W 9.94"	10.00U	3.33	6	137	147.8	1.12	30.2	52.4
790117	2332 54.12	66N55.44	163W 6.53	13.15		5	249	111.0	0.12	4.S	2.S
790118	16 3 14.22	65N55.66	165W51.34	24.71	2.28	5	194	191.6	0.38	2.9	99.0
790121	1350 39.00	64N11.67	164W 9.92	44.57	1.44	4	278	100.0	0.92	63.1	86.1
/90124	16 4 31.00	64N31.29	162W18.98	10.00	2.9S	6	264	222.9	0.63	47.2	97.2
790126	517 23.64	65N 7.70	165W48.50	10.00	2.2S	6	136	143.0	0.19	13.3	22.S
790126	558 43.59	65N13.26	160W 2.33	10.00	2.22	6	223	100.0	0.70	66.2	32.4
790126	8S7 4.68	64N 0.89	158W37.41	0.00	2.03	4	1S5,332.3	5.18	56.'5	12.6	
790126	12 0 13.88	65N 1.99	165W34.71	9.60	1.96	5	151	149.0	0.04	5.0	10.0
'90126	1443 59.09	64N16.34	158W33.15	0.00*		9	156	330.1	1.46	7.9	10.9
790128	434. 16.98	65N17.35	166W39.90	11.71	1.81	4	156	149.1	0.01	99.0	99.0
790130	736 59.05	66N25.67	167W 3.17	10.48	2.79	4	276	100.0	0.50	99.0	99.0
.790207	1510.35.02	65N11.73	168W47.39	10.00	2.59	4	293	100.0	0.00	99.0	99.0
790212	103S 29.00	64N27.27	162W26.62	"10.00*	2.14	5	151	188.7	0.02	99.0	99.0
790212	19 1 4.93	69N54.93	166W47.89	0.49*	4.49	4	296	694.314.39	99.0	9'9.0	
,90214	1016 5.23	66N24.44	162W14.73	0.69*	1.66	6	158	102.7	0.56	2.0	9.7
790214	1946 4S.24	66N37.59	160W33.91	0.16	2.58	4	255	180.2	3.13	67.8	8.0
790218	1236 90.44	65N13.27	162W27.32	10.00*	1.76	5	129	156.3	0.46	3.8	7.7
790221	22 3 36.35	64N48.70	165W28.46	10.00*	2.31	6	137	171.3	0.21	11.0	18.1
790222	037 14.28	66N11.57	163W48.46	14.68	0.95	4	196	97.5	0.32	16.9	17.1
790222	21 7 6.07	64N59.13	165W41.96	10.00*	1.97	5	141	135.9	0.41	11.5	22.3
'90223	11 6 45. 12	65N48.84	166W 6.89	0.97*	1.67	5	160	143.5	0.45	5.8	7.9
790223	1437 17.37	64N 7.36	164W 2.S3	10.00*	2.52	3	211	100.0	0.12	99.0	99.0
790223	1724 31.67	65N49.49	166W12.17	1.06*	2.16	5	163	145.8	0.59	4.2	5.0
790224	1614 18.71	65N51.33	166W12.83	10.00*	1.98	5	166	149.2	0.39	6.2	6.6
7.90301	1631 36.61	64N 6.56	165W13.72	10.28	2.79	6	168	224.0	0.36	6.1	5.1
"90308	1815 57.29	65N 3.43	164W24.92	0.14*	1.66	5	96	172.8	0.16	3.9	4.9
790310	22 1 3.27	67N 5.65	163W14.76	11.98	0.78	5	281	130.0	0.65	4.3	1.6
790311	512 59.68	65N18.57	161W23.17	13.70	1.70	4	175	180.8	0.28	42.8	32.6
790314	1619 13.36	65N59.65	163W49.13	8.47	1.53	5	176	109.3	0.07	4.0	5.5
790321	1051 1.40	66N18.87	162W37.37	2.50*	0.78	4	153	85.2	0.11	1.7	99.0
790321	1439 34.40	65N 0.83	162W 7.06	41.73	1.64	4	141	162.6	2.86	2.5	99.0
,90324	0 2 19.59	65N 1.00	162W27.12	1.14*	1.81	6	129	151.5	0.58	3.4	7.2
790403	944 11.78	65N17.96	165W 5.78	1.81*	2.16	4	131	134.2	1.55	2.5	7.5
790403	2236' 56.58	66N58.64	163W29.52	6.57	1.40	4	237	126.2	0.00	55.9	8.7
790407	1117 59.65	65N45.97	162W29.40	0.26*	1.9S	5	183	120.0	0.14	2.1	9.2
790409	1510 3.70	68N15.87	166W13.57	10.00*	2.80	6	299	310.6	0.29	38.8	67.3
790409	1919 38.75	64N 7.74	164W 1.16	4.22*	2.29	5	210	100.0	0.09	99.0	75.4
790411	036 18.22	65N13.21	162W56.66	10.00*	1.41	3	1S7	183.5	0.00	4.3	99.0
790411	1324 51.24	66N32.89	157W30.60	10.00*	2.85	3	208	100.0	0.00	93.	599.0
790413	820 23.4S	65N 8.47	162W54.32	10.00	1.70	4	114	148.7	0.63	2.9	99.0
790414	459 57.58	65N 0.48	165W49.87	10.00*	2.07.	4	147	155.8	0.28-	8.4	15.6
790414	1610 54.09	65N33.15	162W 4.9S	1.17		6	142	145.5	0.46	2.8	4.5
'90414	1719 50.79	64N48.33	165W30.69	10.00U	2.85	4	142	172.4	0.15	23.5	39.8

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	GAP	DMIN	RMS	ERH	ERZ		
7904,14	1849	5.87	66N 7.8S	161W37. 13	4.70	4.27	4	250	253.3	8.44	21.	S 1.5	
.790414	19 1	52.84	64N48.68	165W26.08	8.87	1.45	4	133	170.9	0.00	22.7	39.7	
790415	1316	30.43	64N45.39	165W 2.20	8.48%	1.40	4	172	173.4	0.20	25.	1 33.6	
790416	2042	35.56	64N57.12	163 W31.26	10.00*	1.40	3	212	156.9	0.00	99.0	99.0	
790417	1325	37. 17.	64N26.96	165 W31.36	0.39*	0.98	4	276	211.2	0.36	99.0	13.0	
790430	2124	16.44	65N18.49	168W25. 17	3.70%	2.05	4	190	205.3	0.22	9.8	13.5	
790501	1642	11. 13	64 N46.90	165 W14.56	12.89	2. '99	5	184	172.2	0.18	33.1	42.6	
790504	1446	46.52	65N49. 14	166W 6.92	10. 00*		4	161	144.1	0.36	6.1	7.3	
790506	2351	23.82	65N 6.18	166 W54.63	0. 31*		5	101	172.5	0.23	4.3	5.7	
790507	640	45.38"	64 N53. 75	167W26.90	10. 00*	1.62	4	234	206.4	0.09	99.0	99.0	
790507	1317	0.49	65N22.36	161W29.39	.4.83		5	183	172.7	0.32	6.8	21.S	
790509	2048	51.04	65N25.15	163W46.26	4.82	1.79	4	139	192.8	0.00	8.6	8.6	
790513	436	35.06	66N18.07	164W32.08	0. 27*		4	171	174.9	5.91	-59.7	86.6	
790513	1817	51.99	64N11.08	169W55.36	.18.33	2.41	4	184	223.7	0.02	99.0	99.0	
790513	1952	9.94	64N40.17	170W59.37	10.00*	2.37	4	247	100.0	0.	10,	99.0	99.0
790515	1724	36.23	65N12.76	168W48.10	28.85		5	200	187.5	0.02	4.4	8.2	
790515	1742	19.61	65N12.63	168W48.42	27.07		5	200	187.1	0.02	4.8	11.6	
790515	1844	58.24	65N10.36	168W36.27	10.00*		3	187	187.9	0.00	99.0	99.0	
790515	2031	46.76	64N43.61	167W 6.90"	0.00*	1.92	4	203	199.8	2.20	5.8	10.4	
790516	1332	16.37	64N45.20	165W45.01	10.00*		3	173	181.2	0.00	99.0	99.0	
790517	239	36.54	64N22.93	162W40.36	10.00	2.14	5	162	230.2	0.19	99.0	99.0	
.790517	1153	9.75	65N44.28	169W32.23	0.34	3.16	5	234	235.1	0.78	13.5	8.9	
790521	1359	19.81	65N33.56	167W55.27	0.41	2.31	4	188	100.0	4.36	99.0	5.5	
790526	553	50.20	67N 3.96	164W 3.86	10.00%		3	277	100.0	0.00	99.0	99.0	
790526	744	37.04	67N18.07	164W 4.18	15.70	2.39	5	265	2S9.2	0.4755.2	49.7		
790527	140	8.82	65N16.00	170W17.16	0.28	2.64	4	318"	100.0	1.S1	67.3	41.7	
.790529	1125	22. 50	65N16.37	.167W54.41	. 0.02	1..11	5	143	192.4	1.26	5.1	7.0	
790529	1650	22.02	67N47.15	164W24.31	7.45*	2.23	5	289	292.7	0.-3716.9	50.7		
790530	3 0	28.93	66N45.61	162W41.71	10.00*		.3	211	100.0	0.14	99.0	99.0	
790530	1325	13.66	67N 1.95	163W51.22	10.00*		3	241	100.0	0.00	99.0	99.0	
790416	6 4	49.85	65N11.14	168W20.57	0. 32*		4	270	100.0	0.33	19.3	23.4	
790622	521	18.54	65N40. 13	166W 5.26	10.00*		3	142	127.6	0.00	99.0"	99.0	
790623	1617	46.12	69N28.92	177W 0.71	5.09	4.48.4	33S	665.4	0.01	99.0	99.0		
790624	1159	38.44	67N23.59	169W37.28	10.00*	3.35	5	272	311.3	0.50	16,8	60.S	
790712	954	51.57	65N16.09	166W59.68	10.88	1.76	5	173	161.1	0.03	90.0	99.0	
790723	1246	10.06	66N17.97	168W28.87	10.00*		3	286	100.0'0.03	99.0	99.0		
790724	112	56.03	64N45.95	165W35.65	10.00*	1.61	3	156	177.7	0.00	99.0	99.0	
790724	1522	52.72	66N 3.48	167W28.62	0. 34*		5	216	193.2	0.76	10.4	5.3	
790726	11 9	5S.91	66N47.72	165W19.58	10.00*		3	225	180.7	0.00	99.0	99.0	
790731	6 1	53.01	66N 0.07	166W38.41	10. 00*		3	19?	170.7	0.00	99.0	99.0	
790802	819	10.49	64N47.25	165W26.69	10.00*		3	158	173.6	0.00	99.0	99.0	
790808	448	31.89	68N15.67	161W 7.92	10.00*		3	334	100.0	0.60	99.0	99.0	
790816	1944	28.93	65N21.51	166W 6.20	10.00*		4	127	127.1	0.79	52.	690.6	
790817	10 5	58.75	65N58.22	164W49.65	10.34	2.05	5	191	158.7	0.55	99.0	99.0	
790818	1644	44.29	64N55.34	162W43.48	10.00		4	137	174.2	0.16	3.7	99.0	
790901	151	41.11	64N53.90	165W 6.47	10.00*		4	106	158.2	0.14	22.7	36.6	
790901	349	31.09	64N53.88	165W11.40	10.00*		5	108	159.0	0.07	37.8	63.0	
790901	411	19.54	64N53.18	166W21.13	10.00*	2.45	3	260	100.0	0.03	99.0	99.0	
790903	439	6.96	65N 5.81	165W19.11	16.16		4	151	138.7	1.16	46.5	78.3	
790903	533	43.85	65N54.57	166W22.69	10.00*		3	180	94.4	10.66	99.0	99.0	
790908	1412	4.89	63N39.97	155W42.33	10.00*		3	172	100.0	0.00	99.0	99.0	
790911	925	22.69	64N58.45	162W22.03	10.00		4	148	177.7	0.78	2.7	99.0	
790914	143	7.22	65N30.80	164W11.47	10. 00*		3	214	100.0	0.00	99.0	99.0	
790922	036	50.77	64N44.22"	165W10.56	21. 56*		4	164	100.0	0.75	99.0	99.0	
791021"	411	42.53	66N46.41	163W 0.84	10.00*	0.80	3	196	95.3	0.00	99.0	99.0	
791024	2219	33.16	65N14.56	164W45.81	10.12		6	84	150.9	0.14	7.4	13.8	
791027	032	51.51	61N36.70	168W24.16	8.46	3.79	4	324	100.0	1.96	99.0	99.0	

DATE	ORIGIN	LAT N	LONG W	DEPTH .	MAG	NO	GAP	DMIN	RMS	ERH	ERZ
791101	653 46.23	64N12.80	163W39.21	3.52	2.79	4	206	251.7	0.01	99.0	99.0
810110	123 43.43	65N18.45	171W 8.92	25.86	2.01	6	245	209.2	0.56	11.8	21.6
810110	811 30.92	65N51.21	162 W57.04	15.77*		4	169	152.7	0.85	8.8	9.2
810112	854 53.61	65N31.94	166 W58.20	4.52	1.85	8	131	131.5	0.	1S	1.6
810120	15 S 41.96	62N43.50	150 W23.94	17.10	3.08	5	"342	592.8	0.16	99.0	9'2.0
810120	17S3 2.19	65N56.37	166W 6.48	0.97		4	184	94.4	0.91	99.0	99.0
810121	336 44.93	65N52.65	166 W38.65	7.03	1.77	5	102	106.8	0.05	6.0	5.2
810121	1443 51.17	66N 8.5S	164 W18.29	16.39	0.83	5	154	98.2	0.21	3."	1 2.6
810126	2 0 37.26	62N 8.86	163W21.69	10.00	2.08	4	262	100.	0	4.40	99.0
810126	236 32.72	65N46.53	165W 9.93	10.00*	1.65	993	94.5	0.51	3.	8-4.9	
810126	1150 16.68	64N41.88	164W11.72	10.00*		3	293	17S.9	0.00	33.6	99.0
810126	20 9 48.76	64N26.84	165W 7.6S	1.50	2.06	12	182	172.6	0.47	3.9	2.2
810128	1346 14.40	65N33.25	164W10.67	25.10	1.28	7	145	103.2	0.87	1.2	99.0
810130	831 54.22	65N32.57	164W 7.97	10.00*	1.90	6	147	105.6	0.63"	2.2	3.6,
810201	1339 7.27	63N17.22	168W22.07	S.01	2.22	7	233	204.7	0.S3	5.1	2.7
810214	222 14.10	65N45.52	166W 7.90	0.27*	1.03	8	92	94.S	0.56	1.0	3.5
810214	1S12 1.83	64N40.18	163W26.05	9.22	1.10	4	180	100.0	0.5S	99.0	99.0
810214	1855 23.70	65N16.67	168W 8.99	5.53	1.63	6	256	153.6	0.50	5.6	8.5
810215	747 36.01	64N46.15	162W51.07	17.40	1.29	9	112	111.2	0.35	1.1	1.4
810216	626 13.13	64N 9.16	163W30.92	0.01	2.05	4	289	254.6	0.S4	99.	099.0
810216	"710 54.50	66N 1.50	166W 6.93	2.16	0.82	4	220	166.4	0.54	99.0	99.0
810217	1514 0.86	66N 4.63	172W13.03	0.00*	2.47	8	289	290.8	0.29	20.2	23.8.
810219	1426 6.02	65N58.19	166W 2.30	4, 23*		3	184	182.3	4.92	99.0	99.0
810219	1849 30.40	64N13.27	170W18.14	4. 23*		5	213	240..9	1.17	44.5	68.0
810221	1429 20.66	64N 3.20	162W37.01	8.79	2.44	5	267	269.6	0.18	11.7	9.3
810222	854 23.66	65N24.85	161W23.54	24.81	1.68	5	305	100.0	0.82	5.6	49.6.
810222	13. 4 28.20	65N25.77	165W17.94	10.00*		"3	188	169.3	0.009900	99.0	
810222	1442 57.51	64N16.65	164W33.31	1.76	1.05	7	21S	158.8	0.72	5.9	2.8
810223	4 2 9.22	65N46.00	166W12.25	1.9S	2.17"9	9	99	139.6	0.39	2.6	4.7
810223	537 23.44	64N28.53	160W16.48	17.55	0.86	6	262	122.3	0.30	3.0	1.3
810223	713 25.21	66N 0.S7	167W40.90	0.16	2.10	5	264	194.2	0.26	3.4	4.7
810224	524 33.93	66N 1.01	167W40.61	3.71	1.33	6	242	145.7	0.28	3.2	2.9
0102?4	'22 5 2.41	66N 0.24	158W22.62	10.00*	3,02	4	360	251.1	0.65	44.6	46.7
810226	1953 33.77	64N17.93	162W20.87	11.91	1.79	11	110	96.6	0.78	1.0	1.4
810226	2138 20.69	65N19.37	162W57.33	10.00*	1.54	3	301	170.2	0.04	99.0	99.0
810227	6 2 27.19	64N 4.42	160W28.81	12.96	1.15	7	280	116.4	0.42	1.8	1.4
810227	2019 59.97	65N 2.62	167W50.02	6.00*	1.55	10	136	128.6	0.64	2.1	4.0
810228	217 18.63	65N18.85	166W57.98	10.00*	1.75	4	165	156.5	0.00	99.0	99.0
810228	556 7.61	65N16.92	167W 4.84	10.00*	2.16	8	88	113.7	0.55	3.4	5.9
EJ10228	1033 6.84	64N21.80	162W39.50	3.73	3.05	10	86	107.70.29	1.8	2.2	
810229	1050 6.18	63N32.27	169W 5.33	10.00*		4	239	298.4	0.40	99.0	99.0
810301	1120 49.42	65N 5.30	166W54.78	10.00*	0.91	6	190	98.0	0.72	1.3	15.3
810302	1417 0.30	65N10.46	167W43.04	11.83	1.52	5	226	130.3	0.31	26.2	22.6
810303	139 45.60	65N34.38	166W58.78	6.14	1.24	8	131	135.5	0.72	1.7	2.3
810303	639 37.60	64N54.57	162W 9.60	13.16	1.53	12	109	116.5	0.48	1.9	3.0
810303	1417 59.76	63N28.54	158W 6.03	10.00*	1.50	6	302	201.1	1.01	23.9	30.2
810303	1958 1.03	65N46.03	168W42.86	4. 23*		3	311	100.0	2.49	99.0	99.'0
810304	12 3 37.42	64N25.34	162W43.10	5.85	0.57	7	156	108.5	0.34	2.0	2.0
810305	1921 35.24	64N52.63	162W 9.72	13.53	0.97	8	107	93.8	0.S9	2.6	3.9
810306	440 4.15	64N55.73	162W14.43	12.46	1.37	15	108	100.6	0.82	1.6	2.9
810307	919 31.67	64N24.16	163W43.00	0.35	1.34	10	135"	121.0	0.49	3.1	3.1
810307	1025 10. 50	65N16.40	165W43.07	10.00*	2.09	16	64	108.9	0.90	1.4	2.3
810307	19 .2 21.40	64N21.11	162W42.58	8.28	0.74	4	190	130.30.17	28.7	6.9	
810307	'20 3 30.70	65N20.42	165W 3.07	5.01	1.10	4	308	100.0	0.39	99.0	99.0
810311	10.17 45. 12	64N47.53	163W18.38	0. 51*		4	221	139.6	0.27	4.6	8.2
810311	2026 31.87	65N 9.54	165W34.91	24.61	1.28	4	191	100.0	0.13	30.5	99.0
810312	45S 1.03	67N 6.44	164W34.79	30.93	1.35	8	258	151.4	0.43	2.7	4.6

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	GAP	DMIN	RMS	ERH	ERZ
S10312	7S3 35.96	63N 4.01	167W53.30	10.00*	2.23	5	236	100.0	0.25	99.0	88.2
810312	1S 6 30.43	64N49.79	162W14.51	0.23*	1.69	11	101	91.00	0.34	1.5	2.7
810312	23 0 36.29'	64N 3.09	160W24.36	13.95	1.42	8	225	120.5	0.46	1.6	1.4
810313	22 0 4.52	64N48.16	162W16.70	8.57	1.40	9	101	89.3	0.45	3.7	6.7
810314	2 6 57.81	65N13.02	165W54.86	0.75	1.23	9"189	136.2	0.37	8.8	7.3	
310314	855 9.26	64N 3.45	160W 9.17	12.99	1.65	12	239	132.2	0.40	1.7	1.5
B10314	1S39 48.52	65N 6.4S	169W10.25	2.99	1.47	8	208	179.0	0.28'	4.7	3.1
810315	S45 46.98	66N19.22	160W42.54	1.25*	2.45	13	232	171.1	1.24	3.2	2.5
810315	1243 5S.45	64N31.68	160W18.49	19.31	0.80	7	244	121.4	0.44	2.7	1.1
810316	21S 38.13	65N32.86	167W 3.03	5.29	1.21	10	130	135.1	0.46	1.7	2.4
810316	219 20.51	65N33.90	167W 2.30	1.00*	0.83	6	131	136.3	0.69	2.6	99.0
810316	7 2 15.21	64N42.12	164W12.33	14.05	1.30	a	135	168.3	0.45	6.4	8.6
810316	859 7.62	65N56.48	166W15.48	7.11	1.20	5	180	88.3	0.59	77.1	27.1
810316	1939 2.98	65N53.25	167W28.68	10.00*	1.05	6	218	141.3	0.57	'5.5	2.8
810317	459 0.97	65N13.14	166W 4.04	14.41"		7	199	139.5	0.22	13.2	6.8
810317	1831 10.78	64N54.02	162W14.52	14.19	1.26	9	106	97.8	0.36	3.0	4.4
910318	1729 11.44	67N17.03	164W28.08	10.96	1.80	10	260	171.0	0.89,	5.1	4.8
810318	1731 10.78	64N54.02	162W14.52	14.19	1.33	9	106	97.8	0.36	3.0	4.4
810318	2111 14.01	65N36.67	164W11.70	10.00	1.93.	4	225	100.0	0.13	99.0	99.0
810320	1910 21.39	65N 0.55	167W54.92	10.00		s	285	100.0	1.03	99.0	99.0
810323	1451 12.3S	65N20.19	162W24.85	1.54	1.10	4	181	144.1	0.06	99.0	99.0
81032S	9 7 12.37	63N13.49	163W54.40	10.00*	0.78	4	241	165.8	0.33	99.0	99.0
310329	3S1 22.94	65N18.48	164W27.67	27.66		8	153	110.3	0*47	1.2	55.8
010330	1324 19.54	65N22.36	166W40.88	0.18*	0.56	7	146	109..2	0.57	0.9	99.0
810330	1842 2S.S7	64N44.14	159W50.19	9.36		9	2S1	148.4	0.42	2.2	1.7
810402	11610.84	62N39.47	166W 9.61	13.54	1.78	5	225	236.6	0.62	17.0	50.1
810404	1038 15.53	65N31.76	166W52.09	10.67	0.71	"8	129	128.6	0.63	1.6	2.2
810404	1117 44.67	65N18.83	164W50.10	0.18	0.95	5	159	108.4	0.12	103	4.8
C310405	1755 53.93	64N51.27	167W59.49	0.01	0.96"	6	258144.2	0.23	2.6	19.1	
810406	2334 6.46	66N18.61	169W52.26	4.23*	1.66	4	27S	100.0	0.21	99.0	42.3
810406	2346 23.86	64N 3.36	168W 1.15	10.00*	1.49	4	181	164.7	0.54	33.0	88.9
810407	132 25.83	65N18.48	165W30.70	5.90	0.68	9	159	117.0	0.35	1.0	2.8
810407	7 9 S0.60	65N56.56	168W38.50	2.97	2.32	5	360	190.3	0.46	19.7	7.3
910410	4 7 43.51	65N50.35	166W 7.07	11.93		4	112	89.7	0.00	15.3	16.2
810410	433 55.80	65N18.53	166W45.12	0.31*		4157105.50.08		2 0		5.1	
810410	545 53.69	63N 2.76	164W32.34	10.00*		3	254	100.0	0.00	99.0	99.0
810410	1142 20.79	63N 9.84	169W 1.53	21.15		4	258	272.S	1.34	99.0	99.0
810411	8 8 21.63	65N 4.22	167W20.78	10.54	0.81	6213	109.4	1.56	1.6	5.0	
810412	415 8.30	65N56.77	166W40.26	10.00	0.42	a	192	104.7	0.96	1.9	1.7
310412	1824 53.78	65N36.64	167W 9.61	2.47	1.16	12	147	142.3	0.57	1.8	2.3
810413	3 8 6.S3	65N46.72	166W 6.74	6.43	0.90	7114	92.40	84	4.6	7.2	
810413	2041 24.02	66N 0.97	167W40.63	0.18	1.11	8	242	145.7	0.31	2.6	2.4
810413	2143 7.99	64N53.06	162W10.95	10.00*	0.50	3	208	156.1	0.00	99.0	99.0
810416	1931 36.77	65N 4.74	172W53.21	10.00	2.09	4	284	407.3	0.29	99.0	99.0
810417	2S3 35.22	66N32.10	164W51.71	10.00*	1.15	4	196	106.1	0.73	4.1	6.3
D10417	2230 16.23	64N25.94	162W26.70	8.98	0.87.	9	119	95.5	0.74	2.5	2.6
810420	1654 3.67	64N49.24	165W13.28	12.93	1.58	12	81	131.7	0.84	2.1	2.4
810424	12 S 1.25	65N25.03	167W22.68	10.00*		3	168	134.1	0.00	99.0	99.0
810425	1 0 4 9	25.18	64N 2.09	160W 4.93	10.74	1.28	6	243	136.2	20.05	1.7
810425	1356 38.33	64N58.67	168W16.37	3.88		5	294	100.0	0.14	99.0	99.0
910426	150 10.71	64N34.82	166W 2.05	7.77		,1.1910223150.00.68		3.1		2.1	
810426	1911 54.82	65N46.66	165W46.55	11.29	0.79	4	128	103.0	0.06	16.2	25.6
810426	1934 30.38	65N45.55	165W48.22	10.00*	0.15	3	141	134.7	0.00	99.0	99.0
810429	9 9 10.03	62N55.87	169W33.36	14.43	1.87	4	284	100.0	0.09	99.0	99.0
810430	21 3 19.38	67N18.64	164W18.07	10.00	1.66	5	263	177.1	0.82	48.0	39.0
810501	425 14.37	65N30.75	170W22.45	0.63	1.17	6	255	214.4	0.78	7.0	3.9
710501	724 0.58	65N 8.58	165W14.47	1.80	1.42	12	130	98.5	0.54	1.2	3.2

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d10501	2041	13.07	65N31.67	166W39.12	6.23	1.25	6	108	123.1	0.38	1.6	3.5	
810502	528	48.02	65N16.50	165W31.55	0.19*	1.22	7	153	117.4	0.71	1.3	99.0	
810502	1749	45.	02	65N16.86	166W26.91	0.63*	1.50	7	148	5'4.7	0.31	1.0	4.4
810503	S52	29.94	65N31.71	167W S.55	10.00*	0.49	4	134	134.6	0.42	3.7	4.7	
810503	1254	11.44	65N 8.35	170W20.76	. 0.63*	2.46	5	241	200.S	0.85	12.4	4.9	
810503	1616	44.17	65N38.62	169W29.40	0.06*	1.30	7	246	100.0	0.23	8.5	4.3	
S10503	2254'	S.19	65N S.70	165W15.92	2.59	0.48	9	148	132.9	0.50	1.3	3.3	
810504	11 8	32.24	65N 6.30	165W 5.27	19.45	0.77	5	182	135.4	0.11	10.3	16.8	
810510	920	10.27	64N25.30	164W 5.93	9.45	0.39	10	188	63.6	0.35	1.4	1.9	
S10510	2052	18.05	66N13.66	162W56.23	1.72	0.84	13	119	71.7	0.69	1.2	2.6	
810511	920	10.55	64N25.90	164W 6.57	10.00*		3	186	64.2	0.00	99.0	"99.0	
710515	1441	57.74	64N44.88	168W36.15	10.00	1.52	4	282	100.0	0.64	99.0	99.0	
810515	2043	40.36	64N24.66	165W23.41	12.02	1.17	11	226	125.6	0.44	3.0	1.3	
810516	1424	30.83	67N15.22	157W55.16	2.50*	1.94	4	304	311.7	0..2699.0	99.0		
810518	225 27. 14	64N24.05	163W18.32		0.63	0.62	6	178	101.0	0.22	"4.2	13.8	
810518	12 9-	5.46	65N51.55	165W38.48	0.00*	1.80	4	235	17S.211.23	19.0	3.7		
810522	550	59.21	65N40.41	168W38.39	10.09	1.27	5	310	199.5	0.85	36.7	21.4	
.10S22	2017	10.05	65N35.12	165W58.29	13.46	0.60	S	127	103.2	0.31	4.6	6.1	
810522	2234	48. 09	65N12.49	165W25.43	0.48*	0.11	10	118	99.2	0.89	0.9	99.0	
810526	057	20.48	65N20.47	162W15.94	10.00	0.91	S	175	119.9	0.65	7.0	"11.6	
S10526	240	43.83	63N35.25	165W10.98	10.86	1.64	6	302	144.4	0.24	6.4	5.1	
810526	953	12. 42	65N47.36	166W11.58	10.00*	0.90	10	98	94.5	0.62	4.4	5.5	
810528	2 9	29.20	64N46.45	165W13.52	10.00*	0.16	3	174	172.8	0.00	99.0	99.0	
810530	6 9	32.00	64N46.30	162W15.89	12.83	0.70	7	232	131.9	0.27	13.7	20.3	
"810531	2122	50.33	65N12.87	167W15.45	0.13	1.72	8262	171.00.43		3.2	2.2		
810605	2336	10.45	65N48.67	157W34.61	10.00*	2.54	5	306	331.6	1.10	99.0	99.0	
-810606	118	12.00	66N13.24	165W50.86	" 15.79	2.03	4	249	100.C)	1.15	37.2	41.4	
810606	333	35.46	67N33.40	164W24.76	10.00*	.	3	290	199.3	0.00	99.0	99.0	
P10606	22 4	37.49	65N31.65	166W15.79	13. 13		4	140	116.8	0.00	3.8	5.0	
810613	172S	19.92	65N 0.74	164W59.33	13.27	0.61	4	194	144.8	0.00	17.2	28.7	
810621	1 4	37. 17	66N40.58	163W27.82	4. 59	0.61	4	196	98.7	0.00	1.7	52.6	
S10621	2341	58.55	64N19.79	168W39.42	10.00*		3	310	100.0	0.24	99.0	99.0	
S10623	1030	37.41	67N10.75	160W51.52	0.03	2.0S	8	293	189.1	0.56	29.0	9.3	
810625	20 0	13.81	64N55.10	162W29.34	10.00*		5	125	97.20.34	3.S	7.6		
10626	1354	2.01	64N29.19	163W34.58	10.00		6	182	147.3	0.43	7.6	7.8	
810704	745	2.14	67N39.13	161W34.59	27.00	4. 80	9	244	281.6	0.41	8.0	7.2	
810705	0 1	0.61	67N42.43	161W24.09	31.62		6	310	208.0	0.17	99.0	40.5	
810705	0 2	20.16	67N27.11	160W24.55	0.00*	0.73	4	330	100.0	0.21	25.1	15.4	
8.10705	0 4	34.8S	66N32.73	162W39.19	20.00*	0.17	4	157	88.0	3.94	19.7	18.2	
81.0705	0 5	9.82	66N31.67	162W35.04	20.00*	0.12	4	165	90.4	3.79	17.4	15.1	
610705	0 6	33.65	66N30.47	162W58.84	20.17	0.32	4	258	72.8	0.02	17.5	21.9	
810705	0 7	39.14	66N32.92	162W35.15	20.00*	0.04	4	165	90.9	3.85	16.8	14.4	
81070S	0 8	54.92	66N33.52	162W46.66	20.00	-0.17	4	143	83.2	4.04	20.0	26.2	
810705	0 9	23.44	66N45.78	162W30.87	10.00-0.67	3	191	103.3	0.00	99.0	99.0		
810705	010	51.59	66N32.05	162W23.38	20.00*-0.03	4	186	98.9	3.85	12.3	8.4		
P10705	010	S3.97	67N36.84	160W32.93	16. 19*	0.80	4	330	100.0	0.16	8i.9	99.0	
810705	012	23.49	67N17.68	162W 9.46	32.88,	2.70	6	293	152.3	0.55	99.0	19.8	
810705	013	47.23	67N12.00	161W22.72	10.00*		3	355	100.0	0.34	99.0	99.0	
810705	014	24.67	66N41.72	162W33.28	116,92	1.79	5	162	98.2	0.00	13.7	30.3	
810712	127	54.86	67N39.82	161W38.93	37.18	5. 20	9	243	197.4	0.18	8.1	5.5	
810803	1329	40.40	67N45.22	161W25.86	0.03*	1.46	4	329	211.0	0.3522.6"	7.1		
E_0803	1333	41.46	67N45.92	162W 2.08	9.35	1.47	5	318	100.0	0.02	29.8	7.4	
810803	2322	56.72	64N 4.81	165W59.11	2.88	2.03	7	279	157.8	0.26	3.4	3.6	
910804	14 9	16.64	67N20.45	160W38.39	10.00*	1.32	3-360	100.0.0.0.07	99.0	?9.0			
310804	1439	17.08	67N37.10	161W25.88	2.33	1.32	6	320	199.9	0.25	9.1	4.4	
310S04	2232	29.19	67N 2.73	161W56.09	14.65	0.30	4	310	141.6	0.00	5.3	3.4	
310805	16 9	52.73	67N40.42	161W15.80	3.04		4	348	100.0	0.17	99.0	99.0	

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	GAP	DMIN	RMS	ERH	ERZ	
810906	322	31.00	64N22.20	162W59.44	9.70	4	176	116.6	0.00	99.0	22.2	
810808	1737	4'?.05	67N23.84	161W27.49	13.94	4	323	182.1	0.00	14.2	2.9	
810808	21	6	45.93	65N 3. 19	165W24.61	4.73	5	198	144.5	0.08	3.1 5.3	
810808	2354	15.05	67N 2.56	160W18.55	0.74*	4	349	100.0	0.02	99.0	99.0	
S10810	1118	14.57	67N43.17	161W11.15	. . 0.16	1.47	6	329	100.0	0.33	10.8 4.5	
810810	1242	20.49	67N47.97	161W22.99	13.92	7	322	216.2	0.35	S6.4	73.7	
810811	113	30.04	64N28.28	164W44.56	10.00*	4	192	95.0	0.15	18.9	32.3	
810813	1544	6.73	64N53.00	161W 2.37	10.00*	2.4S	6	152	225.0	1.23	38.2 66.0	
810815	7	3	8.72	67N48.99	161W41.97	6.71	2.42	8	306	209.3	0.24 5.7 2.5	
S10S16	1120	50.66	67N 5.54	160W41.53	5.00*	2.52	5	2S6	270.4	0.18	99.0 15.5	
S10819	1120	10.46	68N25.65	160W48.10	0.31*	2.93	7	323	419.4	0.45	36.7 37.3	
810819	1S46	0.64	65N44.49	166W 4.98	0.20*	2.83	10	175	135.4	0..S4	2.3 2.6	
810902	1217	3.1S	67N 7.29	164W51.39	10.00*		5	261	176.1	0.20	99.0 51.6	
810902	1432	8.62	67N22.82	165W 3. 11	. 24.6S		5	200	203.2	0.43	8.1 12.0	
010903	542'	5.83	65N 1.14	167W26.85	39.70*		4	223	115.2 0.95	36.	1,36.8	
810903	2227	'2..17	65N57.01	161W 5.80	10.00		4	202	206.2	0.73	10.9 99.0	
810904	455	34.04	65N56.33	163W36.16	10.00	1.14	10	113	120.2	0.75	2.8 5.6	
S10906	1322	9.15	59N51.97	159W 1.62	8.13	3.37	5	336	618.5	0.07	9900 99.0	
010907	456	30.03	62N29.25	153W21.85	10.00	2.96	4	345	654.3	0.13	99.0 99.0	
810910	11	7	S.72	65N14.72	159W53.91	s. 15		4	257	100.0	0.00	85.6 99.0
810914	7	7	39.95	66N45.10	162W45.29	10.00*	0.94	3	155	181.5	0.00	99.0 99.0
-	810914	1336	25.27	66N27.85	161W48.81	11.31		5	236	122.6	0.16	99.0 99.0
S10919	748	28.S6	65N58.38	163W44.73	13.09		5	136	109.8 0.13	2.5	2.3	
810919	1244	29.61	64N55.79	1631424.30	10.00		8	138	102.1 0.46	2.9	5..0	
810920	2225	5S.47	64N52.71	165W31.61	0.81*	1.15	7	137	121.0	0.70	2.2 4.6	
.810921	13	41S.89	65N 2.66	172W23.33	0.46*	1.83	4	336	100.0	0.02	99..0 99.0	
810921	1924	23.29	65N10.40"	16SU5S.19	"	10.00*	1.44	4	295	100.0	0.07	99.0 99..0
S10921	2144	4.68	64N14.84	170W50.09	174.79*	2.46	4	205	2S5.4	0.87,	64.S 99.0	
810925	529	56.96	67N26.30	165W 1.72	10.00	1.47	4	339	100.0	0.20	99.099.0	
810925	13	0	36.19	64N35.44	162W29.65	.7.60	'1.71	11	79	77.70.40	1.5 2.6	
810927	1659.21,89	66N43.23	163W 9.14	103.60	2.49	5	272	95.7	0.09	29.2	25.3	
810928	"	127	20.28	65N12.37	166W42.77	10.00*	0.72	6	16S"	.95.7	0.56 1.1 15.4	
810928	1349	14.86	64N49.63	164W56.87	9.26	0.97	12	9S	S0.80	0.82	1.1 1.5	
810928	1429	53.19	64N18.04	163W34.33	0.16	0.77	920S	"91.50	0.48	2.0	2.7	
810928	1532	S2.65	64N50.39	164W24.96	4.03	1.54	17	89	95.30	0.85	1.8 2.5	
810928	1542	7.S3	64N55.29	162W22.61	10.00*	0.89	7	108	92.2	0.52	2.8 4.5	
01092S	1921	14.32	66N45.12	162W45.21	20.85*		7	155	93.6	0.74	S9.5 45.8	
810929	511	47.99	67N10.07	164W24.50	16.S3	1.S6	S	251	161.0	0.61	7.5 7.7	
810929	1253	57.09	67N15.79	164W26.52	10.39	1.96	12	258	169.5	0.82	3.8 2.0	
810930	1858	49.68	64N51.12	165W24.32	10.00*	0.53	9	131	125.5	0.73	2.1 3.7	
810930	1947	S0.06	64N51.53	165W29.44	2.79	0.47	-10	135	78.8	0.55	1.6 1.9	
S10930	2334,	12.05	64N24.58	164W 6.30	10.00*	0.27	6	191	63.7	0.37	S.1 16.8	
811001	S27	5S.39	64N52.07	165W27.17	3.45	0.93	9	133	77.60.63"	1.7	2.2	
S11001	1512	32.18	66N46.62	162W35.66	19.05*	2.52	10	155	101.1	0.78	50.0 31.8	
S11001	21	9	4.53	67N42.13	161W29.86	5.92	0.97	6	321	204.8	0.20 9.8 4.1	
911003	039	22.42	64N51.41	165W29.58	5.00*	0.35	7	157	78.8 0.51	2.1	17.5	
811003	10	0	29.83	65N19.63	166W24.17	11.11	0.62	9	141	76.8	0.70 1.0 1.4	
811003	1255	36.39	67N37.64	161W33.22	10.88'	0.81	6	319	197.0	0.05	9.0 3.8	
811003	2023	31.21	64N54.85	162W14.68	4.15	1.26	10	107	92.60	0.42	0.9 4.0	
811004	23	1	50.45	64N43.27	165W45.20	0.02	0.92	7	209	85.9	0.84 2.2 99.0	
811005	746	32.03	64N53.13	165W26.90	1.78*	1.58	11	130	78.3	0.52	1.6 3.1	
311005	13	6	26.74	64N34.79	161W28.84	10.00*	1.59	4	122	156.8	0.26 99.0 99.0	
011005	1335	7.17	64N51.34	165W30.52	0.18*	1.37	10	137	79.4	0.45	1.8 4.8	
811005	1349	26.43	64N50.78	165W33.40	0.17*	0.71	7	142	81.1	0.18	1.9 99.0	
811005	2255	57.31	65N37.15	167W 4.01	2.50*	0.05	6	"146	51.9	0.13	0.9 34.5	
S11006	619	36.72	65N20.20	162W33.57	0.64	1.16	15	113	121.3 0.65	1.2	1.7	
811006	7	8	29.S1	65N22.62	162W33.01	10.00*	1.32	6	142	152.0	0.52	6.3 12.2

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S11006	1732	8. 13	64N51. 12	165 W33. 70	1.27*	1.36	14	142	123.5	0.64	2.3	3.0	
811006	1739	1. 09	64N51. 21	165W31. 40	1. 12*	i.	15	1.0	139	123.8	0.51	2.4	3.5
811006	1821	37. 73	64N51. 85	165 W28. 35	2. 16	1.01	10	133	123.3	0.61	1.6	1.6	
011008	2241	0.86	65N30. 53	168W14. 71	0.12		4	296	102.9	2.07	99.0	99.0	
811008	2241	40.8S	65N33. 04	168W 6.35	0.90	1.52	4294	95.0	6.10	99.0	67.3		
811010	1756	21.76	67N15.10	164W39. 76	8.40	1.7S	8	256	164.0	0.41	4.3	2.8	
811011	414	23.07	64N46. 04	165W35. 41	0.03*	1.64	11	155	132.3	0.74	3.8	4.5	
811011	1149	54.05	65N26. 14	166W49. 29	11.28	1.15	8	142	60.4	0.54	1.1	1.4	
811014	442	41.64	67N41. 70	161W23. 64	1.3S	2.23	6	321	207.2	0.12	9.9	4.5	
811014	1010	54.09	65N19. 41	162W50. 46	3.45	1.52	12	128	133.0	0.29	1.1	2.0	
811014	1359	50.7S	66N47. 04	168W37. 77	20. 56*	3.60	10	141	100.2	0.64	33.9	20.7	
9.11014	1749	42.13	65N18. 65	162W48. 07	8.42	1.75	13	130	135.2	0.44	1.3	1.9	
81101S	1 7	43.81	64N51. 93	165W28. 58	1.38*	1.40	12	134	123.1	0.79	1.3	2.9"	
811015	552	49. 73	67N39. 70	161W29. 16	27. 17	3.56	9	316	201.8	0.22	'7.6	8.6	
811013	2020	46.25	65N26. 89	164W56. 50	17. 07	1.51	10	127	96.5	0.32	1.6	"2. 1	
811018	5 6	1.77	66N S.02	166W 1.49	7.76	1.36.	8	192	85.80	0.66	"2.6	2.6	
811018	8	2 45. 11	64N23. 22	163W44. 58	13. 60	1.30	7	182	121.9	0.59	7.1	1.5	
311018	21 3	6. 25	66N32. 52	162W39. 04	24.34	2.02	7	262	74.7	0.42	23.4	96.7	
811020	. 622	14.04	67N27. 90	167W 8.72	10. 00*	3.19	5	295	276.0	0.16	99.0	99.0	
811023	1542	40.67	65N17. 20	166W57. 01	0. 69*	1.31	6	168	78.0	0.11	1.4	99.0	
811023	1824	22.2S	66N34. 36	162W48. 59	40. 48*	1.89	4	269	82.4	0.50	99.0	99.0	
811024	1237	3. 61	67N16. 06	160W52. 77	1.78	2.03	.6	322	193.4	0.12	7.6	5.4	
811024	1917	43.24	65N46. 62	166W 7.03	3.08	1.57	7	103	87.80	0.23	1.4	3.4	
811025	1056	42. 14	66N44. 07	164W38. 26	22.96	1.41	11	211	115.7	0.67	2.0	1.3	
811025	1347	54. 51	67N36. 64	165W55. 88	12.32	2.14	4	295	188.8	0..03	.33.2	.99.0	
811026.	650	37.07	66N31. 83	162W31. 84	42. 40*	2.49	4	272	92.7	0..55	85.4	'99.0	
811026	7 8	43. 80	66N51. 20	162W 0.76	91.36	2.'17	'5	277	127.5	2.65	7.-1	3.8"	
811027	S37	36. 41	67N27. 38	160W13. 86	8.96	2.33	4	357	100..0	0.11	99.0	66.6	
811027	1210	28. 74	63N57. 49	160W11. 68	10. 00	2.66	4	347.	100.0	0.29	99.0	99.0	
811027	2248	25.1S	64N58. 72	162W36. 97	0. 39*	1.69	10	136	114.4	0..28	1.4	4.2	
811030	129	25.03	67N46. 18	161W 7.64	46. 61		5	324	221.0	0.54	13.7	6S.6.	
811031	161S	44.35	65N15. 91	165W35. 09	10.0"0*	0.83	6'	,150	79.3	0.43	2.S	4.8	
811101	352	5. 64	65N14. 65	165W51. 00	4.29	0.66	6136	79.01	0.03	2.2	4.9		
811101	1826	13.36	65N20. 93	165W40. 47	18. 67*	0.61	6	105	88.6	0.92	6.9	7.1	
811102	1220	8.03	64N28. 47	160W12. 52	10.00*	1.96	6	262	248.1	0.27	99.0	63.9	
811102	1252	1.32	65N38. 70	167W26.10	3.85	1.01	5	170	67.4	0.08	1.2	27.8	
811103	750	41.61	64N47. 93	165W43. 26	12.45	1.22	8	191	127.6	"0.54	5.5	2.0	
811103	10 4	57.86	64N58. 23	164W 5.41	3.12	2.18	8	96	106.8	0.36	2.1	,3.1	
811105	1946	56.78	67N43. 16	161W42. 89	32.84	3.38	9	310	200.4	0.15	6.7	6.3	
011106	0 2	4.34	67N12. 85	165W26. 54	17. 52	2.34	9	255	148.4	0.89	7.9	9.5	
811107	22 4	29.	S3	64N58. 06	164W 8.47	15. 63	1.42	8	110	142.4	0.25	1.9	2.4
811108	14 6	12.12	65N20. 55	162W29. 35	3.17	1.52	7	146	141.3	0.30	2.4	2.2	
811109	1421	56. 41	65N21. 28	168W 8.93	1.94	1.46	10	258	108.2	0.41	1.8	2.5	
811110	1847	40.69	65N11. 14	164W33. 83	6.8'5	1.30	9	158	113.0	0.49	1.6	3.6	
811110	20 9	35.10	64N58. 10	163W46. 53	22.73	1.24	11	113	132.3	0.64	1.2	3.3	
P11113	056	12. 08	66N40. 87	162W56. 52	20. 00*	1.28	4	198	87.8	4. 13	99.0	99.0	
811113	725	54.06	64N55. 81	165W33. 01	11. 55	1.08	8	188	132.9	0.96	3.3	1.9	
811113	929	32.38	64N58. 37	166W 6.33	0.31*	1.07	7	211	106.1	0.38	6.3	5.6	
811114	740	17.72	67N52. 75	161W11. 11	28. 29	2.61	5	324	228.4	0.10	11.3	10.2	
811114	8'39	38.40	67N41. 14	161W22. 62	1. 81	2.80	7321	206.9	0.59,	7.6	3.7		
811114	1214	0. 77	65N47. 92	166W10.78	9.20	1.99	9	95	05.7'	0.51	1.6	2.4	
811115	11 3	55. 64	67N33. 44	162W58. 86	16.79	1.88	6	308	182.1	0.20	" 8.0	2. 8	
811115	1349	59.71	65N28. 63	163W45. 44	12. 70	2.58	16	88	115.4	0.79	1.6	2.5	
811115	1849	10.70	67N45. 82	161W39. 04	20. 99	3.19	11	306	207.6	0.29	13.5	18.6	
811115	21 5	58.24	67N53. 82	161W37. 53	46.36	3.50	11	308	351.9	0.72	8.4	42.8	
811115	2119	2.51	66N21. 88	161W 4.05	10. 00	2.15	5	297	100.0	0.32	99.0	99.0	
811121	2355	42. 21	66N 7.62	167W51. 23	4.53	3.24	10	224	117.5	0.53	6.3	4.4	

DATE	ORIGIN	LAT	N	LONG	W	DEPTH	MAG	'NO	GAP	DMIN	RMS	ERH	ERZ	
811122	1420	45.25	66N33.30	162W44.	08.	41.52*	1.78	4	269	84.9	0.33	63.2	99.0	
811123	020	14.11	67N43.95	161W51.	75	12.30	3.26	10	310	278.7	0.60	4.4	2.0	
811123	728	2.31	62N 8.55	154W29.	54	10.00	.3.10	10	323	412.4	0.23	99.0	99.0	
811123	9 9	21.73	65N20.41	168W	7.79	1.76	1.10	7	255	108.5	0.49	2.2	3.6	
S11123	2150	15.85	65N29.32	163 W44.24		0.21*	1.62	12	89	116.5	0.39	0.7	4.2	
811124	8 6	4S.73	66N10.72	163W	8.25	74.34	1.23	6	118	143.6	0.27	3.7	5.9	
811125	S47	9.65	64N41.89	164 W43.46		0.64*	1.25	5	141	98.5	1.81	,1.6	5.3	
011125	2129	20.41	63N55.28	165W19.93		9.01	1.82	10	277	132.4	0.21	2.1	1.7	
811126	013	13.42	64N33.44	160W41.01		10.19	1.44	8	181	104.3	0.49	1.6	1.9	
811126	320	18.47	64N34.86	168W44.77		2.14	1.75	8	176	161.7	0.23	1.9	2.5	
811126	836	23.38	65N56.87	174W49.26	10.00*	3.26	5	292	299.3	0.23	84.0	81.8		
811128	21S3	4.03	65N48.62	166W	4.27	.1	0.00*	1.02	5	141	SS.7	0.36	2.7	4.2
811129	2118	5.37	6%(35.86	167W11.04		5.00*	0.88	6	145	S6.3	0.16	1.0	16.6	
811130	1052	54.87	65N48.77	166W20.12		7.49	1.29	10	129	79.4	0.29	1.0	2.0	
811201	1422	46.06	63N23.92	166W55.10	10.00*	2.42	7	220	216.7	0.41	16.1	14.4		
811201	1851	57.89	66N30.46	162W48.90	79.51	2.19	5	140	79.9	0.15	4.4	6.7		
811204	624	37.96	66N27.26	163W 9.20	10.00*	2.24	7	253	151.3	0.77	7.3	12.1		
811204	22 6	4.99	65N 1.36	164W 9.13	12.04	1.13	S	132	102.0	0.81	1.S	3.6		
011205	1223	32.26	65N18.34	165W16.69		S.60	1.2S	&	164	82.70.69	2.4	S.1		
811205	13 9	0.1S	63N54.96	160W11.57		9.00		5	320	135.4	0.04	5.9	1.9	
811207	19 6	55.54	66N49.23	162W 6.90	78.83	2.37	5	265	121.8	2.74	7.0	4.0		
811207	1928	39.44	67N43.12	161 W42.31		9.83	2.88	8	319	200.6	0.68	S.7	2.5	
811207	2249	S. 01	67N14.63	161W33.86	29.	67	3.39	9	311	167.7	0.63	13.4	8.5	
811208	0 5	23.47	67N50.21	160W21.99	15.37	2.65	6	329	249.3	0.17	29.8	34.4		
811209	1435	51.60	65N28.92	166W	2.48	2.91*	0.90	7	126	89.0	0.29	1.S	11.1L-	
811209	1836	52.09	65N13.22	164W16.42		0.39*	1.30	9	135	119.9	0.42	1.8	3.2	
811210	10 9	5.62	65N15.36	164W14.16	11.64	1.35	11	85	11,6.8	0.56	: 1.6	2.4		
811210	21 8	58.25	65N 9.46	161 W15.24	17.98	1.28	,6	207	116.5	0.40	5.0	3.6		
811211	1644	11.38	67N30.35	161 W43.32	27.56	2.68,	6	318	266.	"3	0.52	14.3	16.1	
311211	1730	52.42	65N33.72	167W39.15	10.00*	0.69	5	161	76.1	0.19	1.5	7.9		
811212	1612	6.24	65N16.37	166W50.19	10.00*	0.73	4	165	105.0	0.43	2.1	36.1		
811213	9 7	41.49	65N47.19	166W17.37		4.	11	1.46	9.115	80.5	0.57	1.0	2.3	
811213	1028	59.08	65N 1.55	162W25.42		1.00	2.12	13	107	98.30.59	1.2	2.3		
811214	2020	40.67	65N30.67	167W 3.42		7.94	1.59	8	137	59.2	0.32	1.0	2.8	
811215	140	25.82	66N27.54	163W 5.63	10.00	2.80	8	255	154.0	0.85	4.6	7.1		
811215	2134	50.67	65N53.88	155W 8.15	18.06	3.36	10	153	321.1	0.26	10.0	7.2		
811215	2348	45.33	65N20.88	162W28.52		4.85	1.72	11	146	113.9	0.18	1.3	1.6	
811216	1042	41.29	64N55.18	162W23.59	13.13	1.10	7	144	103.2	0.43	2.5	3.5		
811217	2247	33. S0	65N17.85	171 W22.73		0.00	2.35	5"	351	100.0	0.13	99.0	99.0	
811218	15 3	2S.74	65N 9.56	167W39.07		5.00*	0.92	6	268	107.1	0.88	2.1	19.5	
911219	13 0	59.37	64N48.09	171 W14.39	10.00	2.68	10	256	243.5	0.74	45.2	37.6		
811220	1021	49.92	62N11.51	171 W54.49	35.58	3.54	6	331	100.	0	0.13	99.0	99.0	
811226	7S3	20.65	66N35.23	162W37.56		9.36	1.38	10	161	90.6	0.57	1.0	2.4	
811227	1541	40.12	64N56.88	162W25.05	10.00*	0.97	4	144	104.5	0.24	2.3	66.0		
811228	12 7	9.13	64N51.70	171 W27.87	10.00*	2.77	10	262	252.1	0.87	47.4	41.8		
811228	2140	40.21	64N48.31	171 W27.16	33.41	2.50	8	262	253.2	0.82	99.0	99.0		
311228	2145	36.20	64N43.09	162W31.92	22.04	0.98	7	131	89.0	0.26	1.1	1.4		
811229	1242	8.72	65N36.33	163W 3.43	28.26	1.31	12	193	141.,0	0.97	2.0	7.7		
811231	621	12.97	63 N29.91	161W41.79	17.32	1.36	10	190	72.0	0.54	i.3	1.1		
811231	2135	15.87	65N38.04	163 W20.59	14.06	2.13	10	135	136.6	0.52	1.9	2.5		
820101	13 9	58.07	66N22.99	164W54.53		4.23*	1.87	4	241	132.8	2.35	12.3	3.4	
820102	1359	35.	17	67N32.49	164W11.36	10.87	2.01	6	279	202.0	0.32	25.9	24.8	
820102	21 0	20.34	67N21.99	164 W16.54	10.00*	1.63	5	279	183.0	0.34	30.3	32.0		
820103	1617	1.38	67N27.74	164 W13.74		5.44	1.91	5	285	190.8	0.19	11.	i 10.6	
820104	2353	14.	11	67N22.69	160W 2.57	10.53	2.92	7	307	100.	0	0.77	55.3	33.3
820105	218	5.53	65 N20.68	165W41.58	10.00*		6	191	88.2	0.86	6.4	19.4		
820107	633	19.30	65N 8.35	162W	2.28	10.00	1.53	4	245	118.8	0.48	11.7	7.1	

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820107	2131	52.74	64N37.74	165W 0.44	5.71	1.26 .8142	95.6 0.55	2.0	9.1	
820107	2132	25.27	67N25.70	164W 3.81	10.00*	2.44 7 204	193.6 0.7S	1S.	2 1S.	4
820107	2239	43.90	65N 0.32	164 W53.98	17.03	1. 13 7 170	70.7 0.54	1.7	2.0	
820109	1 S	31.21	64N21.28	163 W56.67	11.22	1.87 6 199	72.6 0.20	3.0	2.0	
820112	S14	39.87	64N49.35	162 W20.89	48.42	2.17 7 97	88.3 0.S5	2.4	7.	1
820112	2254	12.58	67N 5.23	163 W53.72	2S.86	2. 11 6 255	166.7 0.37	23.9	99.0	
820114	238	42.81	64N47.27	171 W29.69	10.00*	3.43 ,10	262 275.2	1.38	12.9	12.5
S20115	1026	34.01	64N46.37	165W12.05	0.28*	3.48 10	83 77.2	0.42	1.6	3.4
820116	634	3.71	64N54.64	171W27.42	10.00	3.48 9	261 267.1	0.58	99.0	99.0
820116	123S	8.00	64N46.46	171W24.28	4.12	3.08 10	260 272.2	1.01	16.3	1S.0
820116	1633	43.54	67N 5.14	16 W 5.81	18.30	2.68 7	272 132.5	0.26	5.2	3.5
S20116	2041	33.72	64N46.89	171W23.33	10.00*	2.79 7	260 271.2	0.91	27.6	21.4
820116	2325	2.15	64N49.02	171 W28.62	6.25	3.17 10	262 272.8	1.54	12.1	14.4
820117	545	13.24	64N53.10	162W11.21	10.00*	8 140.	93.8 0.60	"2.2	4.5	
820117	8 5	22.56	64N45.67	171 W20.72	10.00*	3.16 7	259 270.5	1. 11-21.4	20.3	
S20119	13 3"	9.72	65N 1.9S	164W 4.86	0.22*	1.14 7	149 98.2	0.30	1.7	99.0
820120	1322	11.25	65N13.59	168 W38.03	2.50*	3.15 9	300 171.2	0.47	2.7	4.0
820122	O 5	33.14	64N49.24	162 W14.37	1.86	1.75 10	100 89.0	0.65	1.2	5.7
820122	1145	10.10	61 N49.41	165 W15.15	10.00*	2.73 6	336 100.0	0.09	99.0	99.0
820122	1159	41.22	65N48.11	165W44.43	7.52	2.04 5	104 78.00	0.24	2.3	4.4
820123	1458	39.17	65N58.04	164W 5.19	10.00*	1.23 8	118 98.2	0.69	2.4	2.7
820123	1814	17.37	65N 8.55	167W55.41	11.95	2.31 10	184 137.1	0.52	1.9	1.6
820125	1718	S4.39	65N46.62	166W 2.27	6..80	2.56 12	141 09.9	0.65	2.3	2.5
820125	1934	46.61	65N 0.07	165W 4.71	12.81	12 108	71.4 0.77	1.8	1.7	
820201	1719	S.84	67N55.70	161W40.13	4.05	3.34 8	314 300."	0 0.13	92.2	33.2
820203	650	39.57	64N49.48	165W 5.04	10.00*	1.09 6	163 76.4	0.39	1.9	11. 1
820204	19 7	"12.53	67N41.04	164W22.91	10.00*	1.98 '3	296 100.0	0.00'	53.2	99.0"
820205	7 0	0.83	66N 2.63	161 W32.03	10.00	2.70 6	279 100.0	0.75	55.2	50.8
320205	7 4	38.62	67N50.36	164W38.28	9.24	3.00 '4	302 225.0	0.02	99.0	99.0
820205.	756	39.72	68N 0.88	164W40.86	2.90*	2.76 4	308 243.1	0.03	99.0	99.0
820205	812	9.56	66N 4,	17 161 W52.91	. 15:77*	2.09 5	269 198.7	0.79	41.2	40.9
820206	21 8	12.60	65N17.71	165W35.15	8.57	1.22 6	252 121.8	0.15	3.2	4.0
820206	2252	32.86	65N49.54	163 W44.01	17.34	12 141	124.4 0.25	1.2	1.7	
820207	1330	49.05	65N17.92	165W17.18	10.00*	0.76 5	166 82.3	0.64	2.6	4.5
320207	1916	32.36	65N49.13	163W45.81	5.42	1.48 9	123 125.6	0.57	2.4	5.4
820208	1751	53.85	67N 0.22	169 W49.20	0.00	2.61 4	329 1,00.0	0.06	99.0	99.0
820209	1545	11.81	64N28.96	162W 0.67	5.66	2.26 13'108	95.8 0.70	1.3	1.9	
820209	1717	0.'75	65N50.35	163 W45.02	17.47	1.66 12	140 123.3	0.31	1.1	1.6
820211	147 32.75	67N41.16	162W 7.66	10.00*	2.89 4	32s 100.	0 0.12	99.0	99.0	
820211	12"2	58.69	65N47.66	163W49.07	10.00*	0.76 4	275 122.6	0.23	6.6	8.3
820211	1222	3S.74	65N49.37	163W33.25	19.64	1.09 5	286 135.0	0.27	11.6	8.3
820211	1511	13.0S	65N14.64	167W56.85	6.58	2.69 12	190 143.5	. 0.	S6	1.8 2.3
820211	23 5	46.18	65N50.18	163W40.59	21.27	1.55 9	163 122.2	0.46	1.7	.2.4
820212	135	37.60	65N46.78	163W48.95	7.45	0.07 6	275 122.10	39	2.4	3.0
820212	222S	54.22	65N46.95	163W46.63	5.65	1.19 6	215 123.	S 0.15	2.8	7.0
320213	2159	26.95	65N46.99	166W 6.65	1.17	1.81 4	154 92.0	0.03	99.0	99.0
820214	024	14.85	67N17.98	164W42.01	10..00*	2.00 4	273 168.1	0.16	99.0	99.0
820216	2310	18.74	64N48.33	165W10.76	7.15	1.07 7	137 75.00	40	1.1	3.4
820218	2038	0.	10-64N56.	10 158 W24.34	58.40	2.78 6	295 320.0	0.36	99.0	99.0
820219	22 4	42.26	65N 1.97	165 W39.59	0.63*	1.71 12	156 95.2	0.55	1.5	2.0
820220	1940	24.20	65N 4.97	165W 6.22	10. 00*	0.83 5	221 107.4	1.36	7.7	41.8
320220	2013	49.38	64 N50.26	164W47.36	11.58	1.23 8	158 85.7	0.46	1.2	2. 1
820220	2125	7.34	65N 0.99	165 W37.54	2.97*	0.88 6	182 105.0	0.57	6.0	46.5
820221	013	33. 14	65N13.51	164 W55.60	3.14	1.43 8	170 86.6	0.45	1.6	4.2
820221	524	11.65	66N46.54	165 W46.02	15.69	3.04 5	253 163.7	0.09	51.3	99.0
820222	1223	30.04	65N15.26	164 W50.55	10. 00*	0.86 7	193 87.5	0.56	1.9	16. 4
920223	218	24.20	66 N48.52	165 W31.05	16.07	1.60 5	249 128.8	0.07	S.6	3.2

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820223	'856 6.84	63N42.22	167W23.93	10.00*	2.81	9 294	190.9	0.36	15.S	17.2	
820224	144 7.12	66N48.91	165W34.59	16.72	.2.05	6 250	131.3	0.15	4.2	1.8	
820224	2217 32.22	66N 1.20	164W 2.97	18.29	0.81	S 144	112.5	0.37	1.9	1.5	
820225	049 27.40	64N51.07	165W30.50	10.	00*1.39	6 160	79.2	0.33	2.2	9.4	
820225.	1 7 7.95	64N51.65	165W27.46	1.87*	1.10	6"153	77.4	0.19	2.1	51.S	
820225	1535 50.22	65N11.75	165W21.71	10.00*	0.78	S 163	90.6	0.57	2.3	3.3	
S20225	23 7 8.7S	64N51.30	165W28.36	1.85	1.93	13 1S5	77.8	0.58	1.3	1.9	
820227	8 4 43.92	65N 1.63	167W49.64	10.3s	1.68	8 283	127.6	0.51	2.,2	1.7	
820227	1036 6.05	67N26.28	162W38.05	10.00*	2.10	4 313	100.,0	0.18	99.0	99.0	
820228	826 29.81	64N51.43	167W31.68	9.46	1.40	5 280	133.0	0.09	4.1	3.0	
820228	2118 38.71	64N52.65	4 2W26.01	24.45	1.33	7 220	100.2	0.79	3.2	99.0	
820229	2 B 24.97	67N25.17	162W53.67	10.00*	2.05	4 305	100.0	0.17	99.0	99.0	
820301	1?46..3S.78	65N22.19	163W58.71	17.60	1.03	10 194	106.3	0.44	1.4	-2.7	
820301	2147 48.93	64N51.76	162W11.68	9.20	1.01	4 263	93.1	0.01	99.0	99.0	
820302	238 42.61	63N20.45	161W59.58	16.31	1.56	,7 167	93.4	0.66	3.4	2.4	
820302	523 59. 11	65N45.89	166W14.46	3.21	0.97	6 181	97.90	0.25	2.8	3.7	
820302	1356 S8.57	64N41.20	160W58.44	7.70	1.57	7 190	95.30	0.37	2.0	3.2	
320302	2013 39.08	64N51 .46	162W15.89	1.98	1.94	11 136"	89.30	0.46	2.1	2.7	
820303	S43 46.45	67N14.29	163W19.54	10.00	2.03	5 281	100.0	0.68	48.9	51.1	
820303	1453 39. 64	64N31.75	170W22.44	11.10	2. OS	4 227	100.0	0.01	99.0	99.0	
820305	13 1 S9. 51	64N52.86	162W16.43	0.87	1.20	7224	96.70	0.46	2.0	4.8	
820306	212 16. 99	64N47.82	165W46.26	5. 74*	1.42	6 197	88.8	0.21	4.8	12.1	
820307	720 36.22	66N16.65	157W24.16	5. 00*	3. 7S	10 169	238.6	0.25	4.8	10.6	
820307	23 2 27. 05	65N29.73	163W50.86	2.15	1.29	7 164	111.6	0.55	1.4	-5.7-	
820308	028 48.31	65N 4.17	168W34.14	3.01	1.77	9 197	161.9	0.48	2.4	2.1	
-820310	22 9 40. OS	64N51.31	165W28.99	1.23*	1.72	11 156	78.3	0.68	1.7	2.9	
820310	2258 19. 28	64N51.17	16 5W28.51	0.44*	1.5S	11 155	77.8	0.53'	1.'8	"3.0	
820311	2134 30.21	64N51.50	165W29.44	2.10	1.39	S 157	78.7	0.18	1.3	4.0	
820311	234S 36.90	65N10. 11	164W46.36	5. 00*	1.03	9 146	77.5	0.68	1.4	29.0	
820312	333 16.00	64N50.51	16 5W30.94	5. 00*	1.25	7 161	79.1	0.42	2.2	16. 8	
820312	1320 0.40	66N 4.41	162W29.17	10. 00*	0.90	9. 168	171.4	0.57	2.6	4.1	
820313	057 44.12	65N13.32	167W57.50	9. 64	1.56	5 285	142.9	0.01	4.6	3.9	
820313	1217 34. 88	64N50.02	165W34.16	10. 87*	1.19	6 169	81.1	0.29	4.4	99.0	
820313	22 7 16. 34	64N47.23	165W50.46	0.16	1.01	4 206	127.9	0.28	16.3	99. "0	
920315	1233 32. 98	64N51.03	165W30.28	5. 72*	1.47	8 159	79.0	0.59	2.0	14.7	
820315	2245 S2. 27	65N21.24	162W28.18	5. 09	1.66	10 247	148.2	0.32	2.0	2.0	
820316	1057 S6. 75	65N19.44	162W29.49	5. 84	1.24	10 245	145.5	0.28	2.0	1.9	
820316	1136 14. 92	65N22.82	165W25.70	10. 00*	0.57	6 210	90.9	1.31	5.7	24.2	
820316	1S28 36. 43	65N19.83	162W26.26	20. 93	2.29	17 160	143.9	0.62	1.4	2.9	
820318	151 53. 82	64N51.49	173W 4.43	10. 00*	2. 53	5 291	100.0	0.34	99.0	99.0	
J20319	1253 56. 29	65N50.33	167W 7.77	0. 00*	3. 28	12 205	164.1	0.64	4.1	2.2	
820321	2118 5. 27	67N37.68	161W32.84	10. 00*	2. 26	4 338	100.0	0.06	99.0	99.0	
820324	123 9. 38	64N34.31	160W40.63	12. 87	1.28	4 178	104.9	0.04	14.1	8.0	
820325	1240 S3. 79	640127.40	163W34.46	2. 18	1.08	6 171	87.2	0.22	10.0	30.3	
820325	1418 12. 56	64N51.06	165W30.08	7. 32	1.28	9 159	78.90	0.43	1.4	1.8	
820325	1425 33. 74	64N51.83	165W29.00	0. 55	1.66	11 155	78.7	0.97	1.9	1.4	
820330	1912 22. 91	64N46.23	165W30.91	13. .22	0.94	6 178	132.8	0.41	99.0	99.0	
820331	1430 35. 37	64N43.66	167W31.50	8. 47	1.39	8 285	146.0	0.62	2.3	1.9	
820331	1 1S29 0. 39	66N45.27	160W21.93	5. 03	2.49	5 272	100.0	0.08	79.7	34.9	
820331	20 2 11. 41	65N30.41	164W49.70	5.00*	1.01	5 248	108.1	1.57	9.2	99.0	
820401	1419 33. 19	64N31.98	160W45.28	0. 37*	1.89	10 175	100.4	0.26	1.5	2.4	
~20403	1745 15. 99	68N18.49	173W33.73	23. 01	3.47	5 352	100.0	0.31	"99. 0	99.0	
820404	051 46. 72	65N22.52	165W22.64	10. 00	1. 72	5 159	90.3	2.03	4.5	34.8	
820404	1912 32. 31	65N 9.28	164 W31.74	10. 00*	1.07	4 201	S0.8	1.84	1.9	4.3	
820405	2033 24. 63	65N 9. so	165W20.17	10. 00*	1. 00	8 165	94.4	0.59	2.5	3.4	
820405	22 7 40.	15 64N28.56	164W26.55	14. 95	2.30	12 180	80.8	0.50	2.5	1.3	
820407	918 34. 98	65N13.62	165W45.56	10. 00*	0. 94	6 141	80.70	3.3	5.1		

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	GAP	DMIN	RMS	ERH	ERZ
820407	1058	27.74	67N15.47	163W47.88	11.28	1.46	5	274	184.2	0.19	39.7
820408	753	39.11	65N10.30	165W39.73	3.11	2.02	9	134	87.9	0.37	2.4
820410	1552	49.66	67N19.34	164W30.09	40.36	1.72	6	275	174.1	0.21	3.3
820410	1845	46.49	64N19.41	163W33.48	3.72	1.79	'13	187	91.4	0.'70	1.9
820411	023	15.85.	64N22.20	163W33.75	3.68	1.62	8	191	89.7	0.26	2.3
820411	722	2.89	64N38.77	163W54.13	'22.59	1.22	10	122	70.9	0.38	2.0
820411	1611"	51.74	67N33.01	164W 6.66	10.00*	3.00	8	291	204.4	0.82	13.1
820412	1045	34.62	65N 2.21	162W31.94	11.15	1.62	12	182	117.S	0.41	1.6
820413	256	6.66	63N28.88	164W14.24	10.00*	1.97	8	273	132.9	0.43	6.1
820414	11 5	38.43	64N25.69	165W26.03	11.53	1.64	12	242	105.9	0.74	2.7
S20414	1434	12.59	65N45.74	166W 9.21	0.53*	2.17	13	164	95.0	0.49	1.5
820414	1523	58.48	65N47.39	166W13.30	6.62	1.29	6	177	95.50	0.16	1.9
820414	2216	9.01	65N52.27	162W16.71	11.16	2.19	5	260	180.8	1.32	23.7
820415	223	39.18	65N19.97	164W24.28	25.48	1.14	9	154	107.2	0.38	1.3
820413	1127	14.39	67N16.72	164W26.69	11.36	1.17	6	272	171.0	0.053	8.7
820416	2059	35.26	65N33.65	166W23.26	9.76	2.00	11	206	118.1	0.66	3.7
820417	2354	43.62	64N28.03	163W34.30	14.40	1.00	10	169	87.1	0.22	3.3
820418	21 7	37.44	66N35.12	162W39.37	10.00*	1.65	7	157	177.3	0.58	33.4
820418	2332	25.64	66N36.37	162W38.62	0.04	1.49	8	159	90.6	0.57	0.9
020419	947	57.53	64N 3.25	151W21.31	10.00*	2.02	7	330	605.4	0.10	99.0
820420	1041	11.75	65N53.77	162W11.14	0.09	1.65	5	254	114.7	0.24	20.1
820420	1051	6.78	65N12.01	164W29.72	24.94	1.29	16	76	82.1	0.49	0.8
820421	747	12.43	64N48.79	165W35.10	9.66	0.95	6	173	127.4	0.94	99.0
820422	742	19.80	63N12.48	151W42.85	10.00*	3.54	8	326	560.2	0.	13.99.0
820422	852	1.10	65N30.83	163W39.16	23.50	0.86	8	208	120.8	0.19	1.8
820422	11 1	1.85	66N58.69	163W29.38	24.10	2.12	10	243	128.1	0.66	3.-4
820422	2234	30.42	65N27.20	163W42.50	9.83	1.58	14	110	101.1	0.55	0.8
820423	942	21.54	67N22.72	162W52.61	17.47	1.67	6	304	100.0	0.37	7.S-
820423	2036	48.31	64N56.18	162W19.06	1.27	1.82	11	148	103.1	0.64	0.9
820425	041	37.44	65N18.89	165W50.07	11.69	0.75	5	180	86.4	0.12	10.9
820425	052	42.35	65N18.46	165W54.29	5.98*	1.72	7	134	86.6	0.96	2.3
820425	053	52.01	65N13.64	166W50.75	0.16	1.93	6	244	101.6	0.28	3.8
820425	156	17.50	65N28.99	165W12.15	7.57*	1.55	5	228	95.9	0.36	10.4
820425	253	18.38	65N23.46	163W38.14	26.86	1.12	9'145	108.8	0.43	1.3	68.8
820426	12 1	28. 14	64N49.22	165W21.49	9.65	0.84	8	143	71.3	0.51	1.3
820426	1256	12.66	64N48.96	163W48.74	0.63*	0.75	7	167	126.0	0.33	3.5
820426	13 5	26.02	64N24.90	161 W45.84	14.07	1.61	6	152	172.8	0.26	22.3
820426	16 4	35.09	65N 8.81	167W13.03	0.	01*	1.54	8	261	109.0	0.28
8.20427	046	11.07	67N38.13	165W53.15	10. 00*	1.64	7	295	191.7	0.74	17.2
820427	131	39.34	64N59.98	166W33.30	0.	16	"0.99	7	238	103.9	0.36
820427	13 0	20.85	65N 3.02	164 W47.45	16.56	0.98	8	140	73.0	0.70	2.6
820427	2022	24.45	64N51.60	165 W15.33	6.85	1.34	11	130	68.9	0.64	1.2
820428	1447	22.24	64N51.63	163 W52.01	30.86	1.06	6	159	144.7	0.16	6.6
820428	2216	48.65	65N27.75	168 W40.76	10.00"	1.88	9	218	185.3	0.75	4.0
820430	1955	2.29	64N54.77	161 W18.30	11.59	2.11	12	145	95.2	0.82	2.3
820501	1223	10.35	65N30.22	158W20.13	9.10	2.90	4	299	100.0	0.03	99.0
820502	1729	23.34	65N47.44	166W 5.41	8.85	2.12	9	149	90.70	0.44	2.7
820503	1528	50.52	65N46.77	166W 3.80	0. 16	1.88	6	145	90.60	0.24	1.5
820507	219	27.01	67N14.45	166 W56.97	38.37*	2.23	8	290	195.1	0.86	26.2
820507	234	58.43	66N35.67	162 W41.40	10.	00*	2.00	4	153	176.4	0.22
S20509	1418	13.39	66N27.89	163 W39.60	10. 00*	1.81	4	246	131.1	4.93	6.8
820509	2212	56.72	66N23.88	161 W36.47	17.47	2.34	4	249	100.0	0.00	57.6
820509	23 2	9.43	67N38.88	161 W36.88	17.60*	2.15	6	319	197.0	0.23	63.4
820510	9 3	36.39	66N 6.22	157W41.40	2S.	12	2.52	6	288	308.7	0.13
820511	246	50.39	63N44.73	166W58.18	0.	15*	1.94	-7	295	179.1	1.42
820511	329	13.09	66 N11.76	162W 4.76	0.31*	0.88	7	20S	110.4	0.36	1.5
820511	8 1 0	7.05	65N 2.25	164 W11.02	10.64	0.85	7	129	100.1	0.20	4.1

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	GAP	DMIN	RMS	ERH	ERZ
820514	1627 3. 15	62N48. 09	163 W11. 39	17. es	1.64	4	278	199. 6	0.48	83.1	17. S
820523	1425 52. 48	65N16. 14	162W43. 02	0.63*	1.45	8	296	148. 1	0.48	2. 1	2.3
820524	2244 16. 86	64N 6. 32	165W38. 49	10.00	2.69	8	255	140.S	0.46	2. 1	2.7
820S29	1653 52.55	64N45. 25	166W49. 67	4.78	1.03	8	265	133. 1	0.08	2.4	1.5
820530	924 30. 41	65N21. 64	162W38. 67	,.	0.08*	2.13	17	137	113. 4	0.67	1.2
820530	941 7. 77	65N21. 08	162W29. 48	0.16	1.39	12	146	113.7	0.73	1.1	1.9
820530	1726" 39.54	64N31. 43	164W14. 59	10.93	1.07	6	202	128. 5	0.06	5.3	2.6
820530	2258 13.60	67N18. 76	164W29. 37	10.00	1.64	7	274	173.4	0.56	3.0	4.8
820531	139 42.62	64N55. 78	162W25. 47	0.06*	1.75	11	143	104.9	0.56	0. 9	2.9
820531	1335 21.10	65N33. 95	165W 3.97	7.89*	1.02	6	241	112. 5	1.84'	5. 5	45.4
820601	1724 44.37	65N27. 70	164W11. 94	20.39	1.71	14	93	101.4	0.72	0. 9	2.6
820603	1147 23.30	65N 1.17	162W25. 42	0.16	1.50	14	145	104.8	0.65	0.9	2.2
020603	1224 21. 78	65N12. W	165W37. 16	10.00*	1.46	11	122	83.8	0.75	1.S	2.3
820605	23 2 35.26	64N49. 22	162W26. 86	6.07	1.76	10	244	95.4	0.47-	1. 8	1.7
820607	2219 51., 58	65N 7.50	164W56. 53	10.15	1.49	6	291	134. 3	0.42	3. 9	2.9
-820609	841-35.55	65N14. 17	162W37. 88	0. 23*		7	271	139.5	0.47	5.4	2.9
820609	8S3 38.06	65N 6.75	162W45. 94	8.25	1.65	7	262	130.8	0.17	2. 4	1.7
820609	10S5 7.06	64N14. 49	163W37. 77	10.00*		7154"	91.42.77		3.415.3		
020609	1118 24. 50	65N12. 35	162W46. 41	3 . 3 5		9	268	139. 8	0.66	4. 2	2.1
820609	1217 12. 98	63N54. 68	163W32. 57	9.60		5	233	111. 9	1.17	6.0	7.2
820609	1231 22.18	65N 9.84	162W49. 20	3.95		9	265	137.0	0.'69	2.7	2.0
-820609	1233 31.92	65N 4.00	162W48. 27	15.00		6	280	127.5	0.07	2.S	2.6
820611	142 25.36	65N 5.65	162W47. 41	0.29*	2. 16	6	285	136.0	0.23	3.0	14.2
820611	2225 17.01	65N 4.65	162W34. 07	25.86		S	220	162. 9	0.25	2.3	99.0
820612	111 20.69	65N 4.60	162W47. 84	0.10	1.77	S	209	1S7. 4	0.15	10. 2	12.8
820615	937 17.41	65N33. 45	167W 0.90	8.05	1.58	7	256	135. 0	0.'32	3. 0	2.1
.820615	1131 9.19	65N26. 53	164W11. 07	" 5.34	1.7S	11	127	10S.7	0.59	1. 4	2.7
820615	1223 6.37	65N10. 73	165W48. 43	7.97		5	176	85. 3	0.01	10. 1	25.4
820615	1337 31.26	65N27. 63	164W 9.87	20.62		12	128	108. 5	0.71	1. 0	2.6
820617	1851 32.72	65N16. 64	164W44. 80	10.00*		5	244	99. 7	1.57	8.3	64.0
,820618	355 0.32	65N 4.25	162W35. 32	24.41		10	219	163. 0	0.27	2.3	99.0
820618	5 1 15. 78	63N28. 68	154W 3.45	0.12	3.72	6	330	565. 5	0.12	99.0	99.0
020"610	2030 18.24	65N 4.40	162W46. 27	12. 40		11	178	158.4	0.37	5. 3	8.6
82061823	9 10.78	65N 6.67	162W47. 87	6.48		10	177	154.1	0.55	5.7	9.5
820610	23S6 43.55	65N 4.75	162W50. 10	9.55		9	208	156. 3	0.07	9. 8	12.2
820619	1333 30. 26	67N16. 06	161W42. 16	10.00*		4	344	100.0	0.12	99.0	99.0
020621	1559 24.46	67N18. 06	161W57. 42	10.00*		4	335	100.0	0.06	99.0	99.0
820623	1214 2.31	64N58. 62	166W34. 93	3.19	0.90	6	240	106. 6	0.13	7. 1	54.1
820624	254 1.54	65N44. 77	162W20. 79	,5.97		8	233	179. 1	0, 41	2.4	3.6
820624	2138 0.67	65N11.10	164W56. 21	0. 74*		6	168	102.0	0.87	2. 1	12.4

TABLE 6

Earthquake No.	Date Yr Mo Day Hr Min Sec						Latitude (Degree) (N)	Longitude (Degree) (W)	Depth (km)	M	Remarks
1	1958	04	07	15	30	40.0	66.03	156.59	Shallow depth	7.3	Location: USGS Fault Plane Soln. No. 1: Wickens and Hodgson (1967) Soln. No. 2: Ritsema (1962)
2	1965	04	16	23	22	18.6	64.7	160.1	5	5.9	Location: Rothe (1969); Fault Plane Soln.: Sykes and Sbar (1974)
4	1964	12	13	00	33	24.7	64.9	165.7	15	5.7	Location: Rothe (1969); Fault Plane Soln.: Geophys. Inst.
6	1981	07	12	01	27	56.3	67.7	161.2	37.2	5.2	Location and Fault Plane Soln.: Geophys. Inst.
7	1960	12	21	14	39	57.0	62.5	154.0		5.7	Location: USGS; First-Motion Data: ISC

TABLE 7

Earthquake or Earthquake Cluster	B-AXIS				T-AXIS									
	Trend	Plunge	Angle ^a	Trend (pole)	Plunge	Angle ^b	Trend (pole)	Plunge						
	Degree				Degree				Degree				B-AXIS Trend Plunge	T-AXIS Trend Plunge
No. 1														
*Soln. 1 (a ₁ , b ₁)	312	27	72	64	161	66	222	76	92	68	334	10	243	16
Soln. 2 (a ₂ , b ₂)	250	26	159	80	57	48	328	82	265	82	62	2	151	2
No. 2	136	24	215	78	304	66	45	85	202	69	304	2	40	21
No. 3														
*Soln. 1 (a ₁ , b ₁)	102	16	11	30	330	80	240	11	283	72	148	11	56	10
Soln. 2 (a ₂ , a ₂)	152	30	61	75	348	60	258	82	283	72	165	6	73	13
No. 4														
Soln. 1 (a ₁ , b ₁)	195	44	106	85	8	46	278	75	204	86	11	3	101	1
*Soln. 2 (a ₂ , b ₂)	240	36	152	37	124	69	34	58	78	54	290	28	192	16
Soln. 3 (a ₃ , b ₃)	234	40	143	74	76	52	344	78	34	78	246	10	155	5
No. 5														
Soln. 1 (a ₁ , b ₁)	212	20	121	87	32	70	303	90	302	65	213	1	122	30
Soln. 2 (a ₂ , b ₂)	266	27	177	66	60	66	329	77	308	68	65	10	159	19
*Soln. 3 (a ₃ , b ₃)	319	50	230	52	88	54	4	90	297	60	111	29	203	1
No. 6	96	21	5	90	296	70	208	84	220	64	115	8	22	25